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BALTIMORE, AUGUST 28, 1913.

QUALIFIED LAWYERS TAKE A HAND IN INCOME TAX LEGISLATION.

It is gratifying to note that, as the
income tax section of the tariff bill
comes before the United States Senate,
men acquainted with the fundamental
principles of law show a disposition to
combat the unconstitutionality, inco-
herency and impracticability of the
measure as it came from the caucus
rush of the House of Representatives.
Time will be saved, however, if the
Senate casts aside the entire section
and commits to a group of its qualified
lawyer members the drafting of a sim-
ple and workable measure that will not
threaten the tariff bill as a whole.

DON'T KILL THE GOLDEN-EGG GOOSE.

It is reported that the property in
Saline county, Arkansas, of the Ameri-
can Aluminum Co. has been assessed
for taxation at \$47,000,000. The Ar-
kansas Democrat, referring to the mat-
ter, says:

Should such an assessment as this stand,
it would make Saline the wealthiest county
in the State.

Eventually such an assessment would
lessen the wealth development of Ar-
kansas by a good many times the total
amount stated, for so exorbitant a fig-
ure on an ore property which can pro-
duce only as the ore is utilized would
greatly injure the State. No State can
afford to make capital timid about in-

vestment by unjust tax assessments. It
is not as though this property were
developed to a point where it was pro-
ducing a revenue in any way commensu-
rate with the assessment. For the good
of Arkansas—indeed, for the good
of the whole South—it is to be hoped,
if this report of an assessment of \$47-
000,000 is correct, that the officials will
promptly reduce the amount and thus
announce to the world that it is not the
intention of any county in Arkansas to
seek to oppress outside capital invested
in that State.

THE SOUTH'S LUMBER CUT.

In 1880 the South cut 3,810,038,000
feet of lumber, or 21 per cent. of the
total cut of the country, which was
18,125,432,000 feet. Twenty years later
the South's cut, 14,444,965,000 feet, was
41.2 per cent. of the 35,067,595,000 feet
cut in the country. By 1910 the South
was cutting 3,000,000,000 more feet
than the whole country cut in 1880. In
1911 the lumber cut of the country was
3,000,000,000 feet less than in 1910,
and last year it amounted to 39,158-
414,000 feet, of which 21,697,519,000
feet, or 55 per cent., were cut in the
South. Comparison of the cuts in the
South in 1911 and 1912 by States is
made in the following table:

Feet of Lumber Cut.

States.	1912.	1911.
Alabama	1,378,151,000	1,226,212,000
Arkansas	1,821,811,000	1,777,303,000
Florida	1,067,525,000	983,824,000
Georgia	941,191,000	801,611,000
Kentucky	641,296,000	632,415,000
Louisiana	3,876,211,000	3,566,456,000
Maryland	174,320,000	144,078,000
Mississippi	2,381,898,000	2,041,615,000
Missouri	422,470,000	418,586,000
North Carolina.....	2,193,308,000	1,798,724,000
Oklahoma	168,806,000	143,869,000
South Carolina.....	816,930,000	584,872,000
Tennessee	932,572,000	914,579,000
Texas	1,902,301,000	1,681,080,000
Virginia	1,569,997,000	1,359,790,000
West Virginia.....	1,318,732,000	1,387,786,000
Total	21,697,519,000	19,462,890,000
United States.....	39,158,414,000	37,003,207,000

In 1912 15 States cut more than
1,000,000,000 feet. Of those 15 States,
9 were Southern, their cuts being, Lou-
isiana, 3,876,211,000 feet; Mississippi,
2,381,898,000 feet; North Carolina,
2,193,308,000 feet; Texas, 1,902,301,000
feet; Arkansas, 1,821,811,000 feet; Vir-
ginia, 1,569,997,000 feet; Alabama,
1,378,151,000 feet; West Virginia,
1,318,732,000 feet, and Florida, 1,067-
525,000 feet.

The largest cut on record in the
country, 44,509,161,000 feet, was made
in 1909. The next largest, 40,018,282-
000 feet, was made in 1910, and in that
year 17 States cut more than 1,000-
000,000 feet, and of the 17 eleven were
Southern. Last year two of them,
Georgia and Tennessee, fell below the
billion-foot mark, and the cut in eight
Southern States—Arkansas, Virginia,
Alabama, West Virginia, Georgia, Ten-
nessee, Kentucky and Missouri—was
less than in 1910.

Washington, on the Pacific coast, led
the country in 1912 with a cut of
4,099,775,000 feet, with Louisiana sec-
ond, Mississippi third, North Carolina

fourth, Oregon fifth and Texas sixth.

Of the total lumber cut last year,
about 14,770,000,000 feet were yellow
pine, nearly all of which was cut in the
South, while more than half of the
hardwood cut of the country was in the
South.

LIFE IN THE OLD LAND YET.

J. L. Caillouet, president of the Ash-
land Planting & Manufacturing Co.,
Ltd., Houma, La., in a letter to the
MANUFACTURERS RECORD, says:

We are just starting in to manufacture
high-grade sugar, in the hope that by mak-
ing a sugar as good or a little better than
the product turned out by the large trust
refineries that we can in this way minimize
some of the loss that the removal of the
sugar tariff will cause us.

Few persons not living in this section of
Louisiana really understand the hardship
that is being forced upon the cane-sugar
producer and the sugar-cane grower. Our
only hope is in the manufacture of a stand-
ard granulated sugar of as good quality as
that produced by the trust.

If at the end of three years we find that
this cannot be done, it will be necessary
for us to grow other things on our lands. It
will be very difficult for us to find some-
thing to replace the sugar cane, but we
hope that we can find something to help us
out.

The MANUFACTURERS RECORD fully
appreciates the hardships that are be-
ing forced upon the sugar planters. The
spirit of Mr. Caillouet's letter is only
illustrative of that which prevails
throughout Louisiana, where the sugar
planters, instead of giving up in de-
spair, are determined to meet the con-
ditions forced upon them in the best
possible way. They are preparing to
put forth every energy to meet the situ-
ation, and if they cannot produce sugar
at a profit under the proposed tariff,
they will endeavor to turn their lands
to other purposes. Great will be the
loss to Louisiana if sugar cannot be
produced at a profit in that State, but
the national loss through the destruc-
tion of the sugar industry of Louisiana
would be even greater than that suf-
fered by the people of that State.
Should the sugar industry of Louisiana
be destroyed, it would be a national
calamity for which the whole nation
would suffer for years to come and in
many ways.

The MANUFACTURERS RECORD is in-
clined to believe, however, that if in
the new tariff bill sugar is not put on
the free list till 1916, that by that time
the sugar industry will be saved
through the assurance of the enactment
of a tariff bill providing a fair protec-
tion for sugar. We do not believe that
this country is yet a free-trade one.

TYPICAL OF THE SOUTH.

The prosperity of a country can be
largely measured by the advance of its
banking interests. Judged by this
standard, Richmond, which is one of
the typical cities of the South, has
been making very marked progress and
is enjoying very great prosperity. The
Richmond Times-Dispatch publishes a
comparison of the banking business of
that city in 1890 and at present. In

the former year the aggregate re-
sources of all the Richmond banks
amounted to \$13,297,648.46, while at
the present time they figure up \$71-
105,787. The total of the present is
five and a half times as great as that
of 1890. This is typical of the devel-
opment of the financial and general
business interests of Richmond, and,
for that matter, the whole South.

FOREIGN COMMERCE AT SOUTH- ERN PORTS.

Of the \$2,465,884,149 worth of mer-
chandise exported from the United
States in the last fiscal year, \$822,287-
017 worth, or 33.3 per cent., passed
through Southern ports. Of the total
credited to Southern ports more than
34 per cent. belongs to Galveston. That
port ranked second among the ports of
the country in the value of its exports,
which was \$281,457,858. New Orleans
ranked third, with \$169,980,277; Balti-
more fourth, with \$116,474,639; Phila-
delphia fifth, with \$76,315,344, and Bos-
ton sixth, with \$69,552,657.

The value of exports from Galves-
ton was nearly \$6,000,000 greater than
the combined values of exports and im-
ports at all of the Pacific coast ports of
the country, and the value of exports
at New Orleans was \$24,000,000 greater
than the combined exports at Boston
and Philadelphia.

In the past two fiscal years merchan-
dise was exported from 93 districts or
ports. In the fiscal year ended June 30,
1913, the value of these exports was
greater than the value in the preceding
year at 61 ports and districts and less
at 32. There were increases at 15 of
the Southern districts and ports and
decreases at 14. One of the most sig-
nificant decreases was from \$6,172,436
to \$2,555,772 at Paso del Norte, Tex.,
reflecting the results of the disturb-
ances in Mexico, there being a decline
also in imports at that point. The
largest increase in any district was
that of \$100,000,000 at New York. The
increase in Gulf coast districts was
something more than \$79,000,000 in
comparison with the increase of less
than \$20,000,000 in all the Pacific coast
districts.

The 1913 exports value at Galveston
was \$16,552,105 greater than the value
of all exports from Southern ports in
1880, and the 1913 exports value at all
Southern ports was within \$13,351,641
of the value of all exports of the coun-
try in 1880.

Between 1880 and 1913 the value of
exports increased from \$264,905,753 to
\$822,287,017, or by \$557,381,264, equal
to 210.4 per cent., at the Southern ports,
and from \$570,732,905 to \$1,643,597,132,
or by \$1,072,864,227, equal to 187.9 per
cent., at all other ports of the country.

Less than one-tenth of the import
trade of the country passes through the
Southern ports, but since 1880 the value
of imports at the South has increased
370.9 per cent., while the increase at all
other ports of the country has been
only at the rate of 158.5 per cent.

In the accompanying tables are com-

pared the values of merchandise exports by separate districts and ports in the South in the fiscal years 1912 and 1913 and also in the fiscal year 1880. The figures of the last mentioned year are used because, under the plan of reorganization of the customs service, which went into effect July 1, it will no longer be possible to continue the comparisons by separate ports and districts with earlier periods. Most of the

trict of Columbia and Alexandria county, Virginia; headquarters, Baltimore; ports of entry, Baltimore, Washington, Crisfield, Annapolis and Alexandria.

Virginia—State of Virginia, except Alexandria county; headquarters, Norfolk; ports of entry, Norfolk (including Newport News), Richmond, Petersburg, Cape Charles City, Chincoteague and Reedville.

Exports from Southern Customs Districts.

Districts.	1880.	1912.	1913.
Baltimore, Md.	\$76,253,566	\$92,210,877	\$116,474,439
Beaufort, S. C.	1,952,644	45,000	
Brunswick, Ga.	996,582	19,889,838	14,667,578
Charleston, S. C.	19,591,127	12,423,035	13,511,858
Fernandina, Fla.	262,871	6,529,640	7,217,087
Jacksonville, Fla.	88,115	2,329,322	2,446,273
Newport News, Va.		6,348,751	13,596,097
Norfolk and Portsmouth, Va.	14,065,455	11,998,594	15,611,091
Richmond, Va.	2,326,915	7,800	
St. Marys, Ga.	66,151	57,699	96,938
Savannah, Ga.	23,992,364	104,286,925	58,235,404
Wilmington, N. C.	3,941,665	28,705,448	19,910,926
Apalachicola, Fla.	7,474	701,095	882,789
Galveston, Tex.	16,749,889	218,146,097	281,457,858
Key West, Fla.	1,052,896	1,599,292	5,111,603
Mobile, Ala.	7,188,749	31,230,117	27,823,998
New Orleans, La.	90,442,019	149,160,910	169,980,277
Pearl River, Miss.	268,372	16,849,483	7,511,192
Pensacola, Fla.	1,930,258	23,886,645	19,643,279
Sabine, Tex.		22,964,280	25,158,182
St. Marks, Fla.	5,062	1,026,300	1,182,000
Tampa, Fla.		4,409,640	4,325,700
Brazos de Santiago, Tex.	2,350,829	1,041,789	920,689
Corpus Christi, Tex.	643,294	10,404,250	10,542,806
Paso del Norte, Tex.		6,172,436	2,555,772
Saluria, Tex.	630,587	2,694,307	3,197,842
Kansas City, Mo.		57,974	215,491
Louisville, Ky.		19,901	9,224
St. Louis, Mo.		1,277	624
Total	\$264,905,753	\$769,678,622	\$822,287,017
United States	\$835,638,658	\$2,304,322,469	\$2,465,884,149

*Including Alexandria, Va., \$42,180; Georgetown, D. C., \$20,039; Georgetown, S. C., \$41,482; Pamlico, N. C., \$21,037, and Teche, La., \$4,220.

Imports at Southern Customs Districts.

Districts.	1880.	1912.	1913.
Alexandria, Va.	\$11,845	\$1,500	
Baltimore, Md.	19,945,989	26,436,490	\$32,895,238
Beaufort, N. C.	1,248		3,099
Brunswick, Ga.	4,958	76,618	119,442
Charleston, S. C.	502,790	5,024,674	4,774,258
Fernandina, Fla.	2,157	45,774	75,545
Georgetown, D. C.	20,699	1,131,915	1,202,370
Jacksonville, Fla.	938	1,354,000	1,371,846
Newport News, Va.		1,964,586	2,260,872
Norfolk and Portsmouth, Va.	47,057	1,809,371	2,111,944
Pamlico, N. C.	6,749	663	
Petersburg, Va.	5,381	372,775	428,326
Richmond, Va.	111,061	926,516	973,087
St. Augustine, Fla.	1,944	11,012	6,012
Savannah, Ga.	483,802	5,129,979	4,461,852
Wilmington, N. C.	100,657	3,090,703	3,570,836
Apalachicola, Fla.	390	1,010	3
Galveston, Tex.	1,094,514	4,309,758	7,820,638
Key West, Fla.	490,598	1,123,028	1,041,757
Mobile, Ala.	425,519	4,633,907	3,675,180
New Orleans, La.	10,611,353	75,089,887	82,399,100
Pearl River, Miss.	857	65,850	138,817
Pensacola, Fla.	15,149	1,534,125	1,698,041
Sabine, Tex.		728,156	2,228,436
St. Marks, Fla.	7,376	6,327	18,521
Tampa, Fla.		4,752,475	4,591,916
Brazos de Santiago, Tex.	1,528,510	218,912	1,084,722
Corpus Christi, Tex.	453,876	1,480,835	2,308,005
Paso del Norte, Tex.	196,804	4,080,366	3,422,768
Saluria, Tex.	93,989	5,122,795	3,538,190
Atlanta, Ga.		277,469	324,219
Chattanooga, Tenn.		57,572	57,323
Houston, Tex.		444,670	465,323
Kansas City, Mo.		1,838,150	2,069,296
Knoxville, Tenn.		11,835	17,153
Louisville, Ky.		757,060	749,951
Memphis, Tenn.		175,281	180,571
Nashville, Tenn.		92,345	57,561
St. Joseph, Mo.		235,191	289,253
St. Louis, Mo.		6,054,566	6,670,333
Total	\$35,996,460	\$161,070,056	\$179,101,711
United States	\$967,954,746	\$1,653,264,934	\$1,812,978,234

*Including Beaufort, S. C., \$28,274; Georgetown, S. C., \$371; St. Marys, Ga., \$10, and Teche, La., \$12,585.

places whose names have long been familiar to students of the South's foreign commerce will continue as ports of entry, but the designations of customs districts have been changed, only two of them in the South being retained among the 16 customs districts into which that section has been divided. These districts, together with their headquarters and the ports of entry embraced by them, respectively, are as follows:

Maryland—State of Maryland, Dis-

trict of Columbia and Alexandria county, Virginia; headquarters, Baltimore; ports of entry, Baltimore, Elizabeth City, Newbern, Manteo and Beaufort.

South Carolina—State of South Carolina; headquarters, Charleston; ports of entry, Charleston, Georgetown and Beaufort.

Georgia—State of Georgia, except the north bank of St. Marys River and St. Marys City; headquarters, Savannah; ports of entry, Savannah, Brunswick, Darien and Atlanta.

Florida—State of Florida and the north bank of St. Marys River and St. Marys City; headquarters, Jacksonville; ports of entry, Tampa (including Port Tampa), Key West, Punta Gorda, Boca Grande, Miami, Jacksonville, Pensacola, St. Andrews, St. Augustine, Fernandina (including St. Marys City, Ga.), Cedar Keys, Port Inglis, Apalachicola and Carrabelle.

Mobile—State of Alabama and all of State of Mississippi lying south of 31 degrees north latitude; headquarters, Mobile; ports of entry, Mobile, Birmingham, Gulfport and Scranton.

New Orleans—State of Louisiana and all of State of Mississippi lying north of 31 degrees north latitude; headquarters, New Orleans; ports of entry, New Orleans and Morgan City.

Sabine—Jefferson, Orange, Newton, Sabine, Shelby, San Augustine and Jasper counties, Tex.; headquarters, Port Arthur; ports of entry, Port Arthur and Sabine.

Laredo—Cameron, Hidalgo, Starr, Nueces, Zapata, Duval, Brooks, Willacy, Jim Wells, Aransas, Webb, LaSalle, Dimmit, McMullen, Live Oak, Bee, Refugio and San Patricio counties, Texas; headquarters, Laredo; ports of entry, Laredo, Brownsville, Rio Grande City, Corpus Christi, Roma and Santa Maria.

El Paso—El Paso and Culberson counties, Texas, and all the State of New Mexico; headquarters, El Paso; ports of entry, El Paso and Columbus, N. M.

Eagle Pass—All counties of Texas lying along the Rio Grande River and not included in the districts of Laredo and El Paso; headquarters, Eagle Pass; ports of entry, Eagle Pass, Boquillas, Del Rio and Presidio.

Galveston—All of the State of Texas not included in the districts of Sabine, Laredo, El Paso and Eagle Pass; headquarters, Galveston; ports of entry, Galveston (including Port Bolivar and Texas City), San Antonio, Dallas, Houston and Port Lavaca.

Kentucky—State of Kentucky; headquarters, Louisville; ports of entry, Louisville and Paducah.

Tennessee—State of Tennessee; headquarters, Memphis; ports of entry, Memphis, Nashville, Chattanooga and Knoxville.

St. Louis—States of Missouri, Kansas, Arkansas and Oklahoma and all of the State of Illinois lying south of 39 degrees north latitude; headquarters, St. Louis; ports of entry, St. Louis, including East St. Louis, Ill.; Kansas City, St. Joseph and Cairo, Ill.

HAMPERING RAILROADS BY NEW LAWS.

Statistics presented in the report of a committee of the American Railway Association reveal that there were 230 laws respecting railroads enacted and approved in various States this year, and that in the 42 Legislatures which were in session there were introduced a total of 1395 bills on the regulation of railroads. Thus about 16½ per cent. of the proposed legislation was enacted into law. In the year 1912 there were 48 bills which became laws out of a total of 292 introduced in 19 Legislatures. These figures show apparently that there was a large increase in the disposition of lawmakers to turn their efforts to the regulation of transportation companies, and that the railroads are by no means out of the woods with respect to the dangers hanging over them in legislative bodies.

Of the total number of bills offered this year 107 related to requirements for the employment of full crews on

trains, but only 14 of them were enacted. There were also 100 bills relating to terms of employment for those in railroad service, but only nine of them became laws. It is revealed that the disposition of Legislators to advocate measures which are calculated to attract votes is not declining, but, on the contrary, shows symptoms of increasing as the years roll on. But there were some other bills passed and approved in even greater number for other objects. For instance, there were 20 relating to the equipment of stations, 14 about headlights, 13 concerning separation of grade crossings, 9 regarding track scales and weighing, 8 about protection at crossings, 7 each as to track connections and equipment of passenger trains. Only 4 out of 65 bills introduced to prohibit trespassing on railroads were passed and approved, and it will be observed that those measures which had the effect of increasing the expenses of the railroads were the most popular with the lawmakers, while those which were designed to relieve the companies of the liability to sustain loss through injury to trespassers met with little sympathy.

Although legislators generally are credited with looking after the welfare of their constituencies more or less assiduously, it becomes apparent that they are not so well informed as to the methods by which that welfare may be assured when one takes into consideration their disregard of facts relating to the financial side of the railroad business. Under the impression that they are benefiting their constituents when they recklessly pass bills imposing financial burdens upon the railroads to secure some modest advantage—one which would probably come along naturally in the course of time, for it cannot be said that railroads are averse to spending money in improvements when their treasuries will bear the strain—they frequently put the lines in a position which forces them to do their financing at high rates of interest, or else prevents them from doing it at all, at least for the time being, and delaying greater advantages to the public than are to be gained by the laws so passed.

CHANCE FOR BRICK MAKING IN FLORIDA.

"By the time Florida sends out of the State a few more million dollars for brick, some bright fellow will invent a brick made of sand, lime and cement and burned almost as hard as glass," remarks the De Land News. "We've got 70 per cent. of the material now—the sand." There will certainly be a few small fortunes made by those people who take the matter to success. Florida wants paving brick and building brick and fire brick and ornamental brick by the million, and somebody ought to have money enough and nerve and enterprise enough to get into the field and start to making them—even if it was necessary to bring some of the materials needed into the State.—*Jacksonville Times Union*.

The suggestion as to the opportunity for investigating the resources for brick making in Florida is timely. That State is becoming a very heavy consumer of paving and other brick, and it is quite possible that good locations for brick plants could be found upon investigation. Some time ago when Fort Smith, Ark., decided to pave 75 miles of its streets with bricks at a cost of about \$750,000 a contractor from another State found an abundant supply of suitable material almost within the city limits. By being able to save freight, he made a low bid, got the contract, built a modern plant, fulfilled his contract with the city, and now runs his plant—a big one—making paving brick, which he markets over a

wide territory. The establishment of similar enterprises could be secured in many other places by judicious initiative and energy.

FACTORS IN WATERWAYS IMPROVEMENT.

Noting the fact that several bills are before the Congress looking to the solution of the problem of floods in national waterways and the conservation of hydro-energy, Albert H. Scherzer of Chicago, who has long shown an active interest in the subject, writes to the MANUFACTURERS RECORD:

Statesmen and economists are now quite generally recognizing the fact that the intelligent use of a nation's water supply is one of the most vital factors for the development of the general welfare and prosperity of a nation. This is illustrated in Egypt by the Nile River dams, which not only store the water not only to be used when needed for agriculture, but to develop power to obtain nitrogen from the atmosphere for doubling the fertility of the soil in the form of fertilizer. In comparing the National Democratic platform adopted at Baltimore, July 2, 1912, with the platforms of the Republican party and the Progressive party on the subject of the nation's water supply, I find that all of the parties recognize the responsibility of the Federal Government of the United States. The platforms call attention to the great loss of life and property, and voice a demand for a prompt and comprehensive remedy. While the platforms of the various parties express different views regarding the subjects of the tariff and finance, the parties seem to be a unit in placing the responsibility for the control of the national rivers in the Federal Government, and in demanding prompt and comprehensive action.

Platforms of political parties reflect in this particular the widening conviction of the intelligent patriotism of the country as to the necessity for an adequate and liberal policy, under Federal auspices, in dealing with the ever-present problem of the streams of the country that under the Constitution come within the province of Federal control. Less than half a century ago activities of the Government in this domain were practically limited to the maintenance or improvement of the navigation of harbors and interstate streams, although as early as 1845 the drainage of wet lands contiguous to waterways was distinctly recognized as a perfectly proper consequent upon river improvement. In 60 or 70 years, however, great changes have taken place in the territory of the Mississippi drainage basin, in which flows the greater part of the navigable streams of the United States. Large cities have been built upon its plains, prairies have been divided into farms, railroad systems have developed and a wilderness has become the home of millions of people and the scene of manufacturing industry. More important than ever before—important to the inhabitants of the Mississippi and equally important to the people of the whole country—has become the carrying out of a definite policy of stream control, primarily in the area of the Mississippi River and its many tributaries, but logically in any part of the country where similar circumstances are found.

In the same period attention has been directed upon reclaiming arid lands by irrigation, recovering millions of acres of fertile soil from surplus water and the derivation of energy in the hydro-electric development of streams, together with the conservation of forest covers in the highland sources of the streams. These projects are akin to those having to deal directly with navigation of waterways. They ought not to be allowed to complicate the situation, for the comprehensive

and practical plan for the welfare of the whole people must take into consideration all the factors mentioned, so that prevention of floods, conservation of stream-flow, removal of water from wet lands, placing of water upon dry lands and derivation of hydro-electric power may all be assured.

TEXAS SHIPPING ORE AND BUYING STEEL RAILS.

The cross-currents of trade were probably never more strikingly illustrated than at Port Bolivar, Tex., last week. Alongside of the new ore-handling dock was the steamship Ogeechee taking on a cargo of 3300 tons of iron ore for shipment to Philadelphia, while at the same dock the steamship Bayamon was discharging a cargo of 2000 tons of steel rails. Thus Texas was shipping a cargo of its high-grade iron ore to Eastern furnaces to be made into pig-iron and steel, while it was at the same time and at the same dock receiving steel rails shipped from Eastern mills to Texas railroads. The "lost motion" of trade, the enormous burden which the South has borne in having to ship out its raw material and buy back the finished product, here found apt illustration. This, of course, is one of the phases that is always seen in the industrial development of a new country. It is not surprising, therefore, that this condition should have been so strikingly emphasized by these two ships lying side by side, one taking out iron ore to Eastern iron works and the other unloading steel rails shipped from Eastern works to Texas.

For the last few years much has been published in the MANUFACTURERS RECORD about the iron-ore resources of Eastern Texas, about the building of a railroad to open up these iron fields, and the construction of ore-handling docks at Port Bolivar with a view to the shipment of this ore to Eastern buyers. The work of actual trade development is now under way; the railroad has been built, the dock is in operation, the ore is being mined, and the shipment of this cargo of 3300 tons will doubtless mark the beginning of work for the shipment of ore, and will probably lead to the building of furnaces and possibly finally steel works in Texas.

MISSOURI SETS THE PACE.

Some ridicule has been bestowed upon the Governors of Missouri and Kansas for the two-day road-making campaign in Missouri. It is true that good roads are not built in a day nor in two days, nevertheless the enthusiasm awakened throughout Missouri and Kansas for good roads will ultimately produce good roads built by scientific workers. In the meantime many a rough place has been smoothed over, many a hole filled, many a drain dug, and in that way alone the campaign was a success. The writer has driven and motored over many a mile of intolerably bad road which could easily and cheaply have been made a passably fair road by a little work and enthusiasm on the part of county officials or of people in the neighborhood. We remember some stretches of roads that will linger long in the memory as indescribably bad which would have been completely changed by such a campaign as that in Missouri. If every State in the South would follow Missouri's example, and call upon every man to volunteer for one or two days' work, and add to this a request that everyone who, by reason of health or business, could not engage in the ac-

tual work contribute enough to pay a laborer's wages for a day, there would be a stir and an enthusiasm and an actual volume of work which would be of immeasurable value as a starter toward getting good, permanent highways.

INCREASING USE OF CEMENT.

Charles Catlett, president of the Security Cement & Lime Co. of Hagerstown, one of the big cement producers of the country, reports that business is much more active than had been anticipated, and that it looks as though prices would advance this fall. There seems almost no limit to the variety of uses to which cement can be put.

PAVING BRICK IN DEMAND.

The demand for paving brick seems to exceed the supply. There are many places in the South where paving-brick plants could be located to advantage.

YIELD NOT TO TEMPTATION.

Unless you are willing to yield to temptation to visit Southern Florida, don't send for a copy of "Fort Myers, the Gate City of the Tropics," issued by the Board of Trade of Fort Myers, Fla. If you read that pamphlet you will be sure to want to go there. Fort Myers is known to many as the place where Thomas A. Edison has his winter home.

\$10,000,000 FOR STREETS.

Baltimore's Extensive Paving Plans Offer Opportunities for Contractors.

The \$2,430,000 total of contracts already awarded by the Paving Commission of the city of Baltimore indicates the broad nature of the work planned by the commission in the improvement of the streets of the city. Of the \$5,000,000 loan authorized, \$2,500,000 have been appropriated since the organization of the commission, May 31, 1911, leaving \$2,500,000 yet to be appropriated, probably at the rate of \$1,000,000 per year. But in addition to this amount, the property tax on frontage improved by the new paving is expected to largely increase available funds, possibly to the extent of \$500,000 per year, making in the course of the next few years \$10,000,000 available for street paving improvements. This is for original construction alone, and may be still further increased by future action. Repair and maintenance expenses are appropriated to be expended under the City Engineer's Department.

The work already done is bringing Baltimore's streets to a notable degree of improvement, practically revolutionizing the old system of cobblestone streets that existed in a large part of the city. This work is keeping pace with the new sewer system, and as the sewer pipes are laid new paving of the improved type is laid, with the understanding that such streets are not to be again torn up, except for absolute necessity in repairing broken pipes, or for other reasons that will be scrutinized by the authorities before the paving may be opened up.

Under the 70 separate contracts that have been let by the commission, ranging from \$5000 to \$150,000 each, 46 have been completed, covering 30 miles of streets; 16 contracts are being carried out, 7 have been awarded and bids for No. 70 have been opened, but contract not yet awarded. The 70 contracts cover about 45 miles of streets, and it is expected that the work will be completed at the rate of about four miles per month.

Of the completed contracts, about 10 per cent. were for granite blocks, 70 per cent. for sheet asphalt and bituminous

concrete, and 20 per cent. for vitrified brick pavement. The cost of 3.34 miles of granite block pavement on concrete base was \$220,500; 17.16 miles of sheet asphalt and bituminous concrete, \$704,100, and 6.64 miles of vitrified brick on concrete base, \$350,250.

Each contract is specifically drawn, and the kind of paving, thickness of each part, the test requirements of materials, financial bond necessary, etc., are stated, so that every contractor has the opportunity to submit bids on a uniform basis with every other contractor seeking the work.

As an illustration of the opportunities presented for contractors from distant points obtaining awards for this work, the latest contracts awarded include two to the Southern Paving Construction Co. of Chattanooga, Tenn., aggregating about \$140,000, and that company is the lowest bidder on contract No. 70, which is shortly to be awarded, amounting to \$132,000. Outside contractors will find great opportunities here in this paving work, for it will probably take five or six years to repave the city.

The forms of construction include sheet asphalt, 1½ or 2-inch topping, 1½-inch binder on 4-inch or 6-inch concrete base; granite blocks, with cement or bituminous fillers on 6-inch concrete base, and vitrified brick on 4-inch or 6-inch concrete base. The plan was at first considered of covering the old cobblestones with sheet asphalt, but it was practically abandoned after experiment, owing to the disturbed condition in which the cobblestone streets were found after sewer, gas, water and other pipes had been laid, and the cost of covering was also found to be almost as much as with new concrete base.

The Paving Commission of the city of Baltimore consists of R. Keith Compton, chairman; James H. Preston, Mayor, ex officio; Douglas H. Thomas, president of the Merchants-Mechanics' National Bank; Alfred E. Booth, Leonidas G. Turner and Samuel C. Rowland, vice-presidents of the Baltimore Trust Co. J. Myers Hedican is secretary. The high business standing of the members of this commission guarantees the most careful investigation of every bid and gives assurance to every bidder of fair dealing without any political control of these matters.

FOR PAVING AND ROAD BUILDING

Secretary Blair Explains the Educational Work of the National Paving Brick Manufacturers' Association.

The increasing amount of paving and road building throughout the United States and the growing interest from an engineering standpoint in all brick and road-making materials gives interest to the educational work of the National Paving Brick Manufacturers' Association. Secretary W. P. Blair of the association, with headquarters at Cleveland, O., while visiting Baltimore at the invitation of the Baltimore Paving Commission and in the interest of efficiency in Baltimore's brick-paving operations, in an interview with the MANUFACTURERS RECORD made a number of statements of interest to good road and street builders in general, and particularly those of the South.

In discussing the cost of brick pavements in the South as compared with the North, Mr. Blair said:

"Brick pavements can be constructed at a lower cost where freezing temperatures do not penetrate the foundation than farther North, where the foundations must take care of frost conditions. In the first instance, pavement may be laid with substantially no other material than with vitrified paving brick; carefully prepared and applied cement grouting, composed

of one part cement and one part sand, and the foundation made of the soil well compressed, crowned and graded so that a uniform support, well drained, is provided. The secret of durability lies in the possibility of effective drainage and the care which may be given to forming efficient jointing between the bricks.

"Farther North more expensive foundation construction is necessary to prevent freezing conditions from injuring construction, but the same care in the details of construction must be carried out in both cases. It is probable that in some cases in the South since the expensive foundation has not been necessary, less care in using materials required has at times prevailed. In some of the most expensively constructed streets of the important cities, such as those of Birmingham and Pensacola, the brick pavement has been laid on concrete foundations. I think that in Florida and other Southern States of similar soil great highways can be built of brick pavements using the foundation soils at hand, but at the same time great care and preparation of the foundation, cementing the joints, etc., must be taken."

"Cuyahoga county, Ohio, including Cleveland, is," according to Mr. Blair, "one of the best-paved districts in the United States. In the city and county together there are nearly 1000 miles of paved roads and streets, and in the county itself there are nearly 400 miles of country roads all paved with brick. About 90 per cent. of all the improved roads in the county are of brick."

Regarding the educational work of the association, Mr. Blair said: "The educational bureau of the association aims to help the taxpayer as well as the builder. Confidence in the association's work is resulting in a wider understanding of good brick paving and the methods of obtaining it. At the Cleveland meeting of the association, to be held on September 17 and 18, the members of the brick committee of the American Society of Municipal Improvements and the members of the Organization for Standardizing Paving Specifications will be present, and, together with about 200 other engineers, will make a tour of inspection under the guidance of members of the association. This will include a number of engineers from the South. A number of the leading brick manufacturers of the South will also be invited to the Cleveland meeting. Further indications of the confidence in the work of the association's educational bureau is found in the fact that we are frequently called upon to give information and to express opinions as to construction methods and paving improvements under way or projected, and inspectors are often employed on our recommendation for the knowledge acquired in the work of the association. We believe that good brick paving redounds to the benefit of the taxpayer and the brick manufacturer, and for that reason we want to see every brick pavement and road well laid and carefully constructed for the resulting efficiency and durability that can be obtained under proper conditions."

"The advantages of brick paving," as stated by Mr. Blair, "lie in the resulting great facility of traction, making this form of paving adaptable to travel and hauling; the extraordinary sanitary features; its comparative economy, considering freedom from repairs as well as first cost, and its durability and lack of dust formation. Even where steep grades are encountered the special hillside block brick fills the requirements of an efficient paving material." "In Alton, Ill.," said he, "an 18 per cent. grade is paved with brick. I consider that too much grade

for any ordinary hauling, but hillside brick is perfectly adapted to grades running from 7 to 14 per cent."

Mr. Blair has been interested in paving materials and road construction for the past 35 years, and is now devoting his entire time and attention to furthering the interests of the National Paving Brick Manufacturers' Association, in disseminating information regarding the use of brick in road building. In this work a large amount of information has been published in the form of specifications and directions for laying pavements. Of these, "Specification No. 1" contains directions for laying vitrified brick street pavements; specifications Nos. 2 and 3 relate to other forms, No. 3 being particularly adapted to paving conditions in the South.

FOR FOUR MILES PIER FRONT.

Plan for Tampa Harbor Approved by Secretary of War.

Referring to the present status of the plan for developing the harbor at Tampa, Benjamin Thompson writes to the MANUFACTURERS RECORD as follows:

"On August 8 the Secretary of War approved plans prepared by me for the Port Commission of Tampa for the development of Ybor channel, or what is locally known as 'The Estuary.' The city of Tampa had near its center on one side a marsh. About eight years ago I prepared a map showing how this marsh could be utilized to furnish deep water, and at the same time fill in the adjoining land, providing for a channel 700 feet wide through the greater part of its length. At a later date the War Department authorized the construction of a channel on about the same lines, 500 feet wide and 3825 feet long. An agreement was entered into with the city, whereby the latter was to acquire and own not less than 1400 feet frontage and secure control of all property within 700 feet of each side of the channel. A contract was let by the War Department for dredging out the channel and work was carried on for several months. The city failed to provide plans for the development of the advantages possible from the construction of the channel, and later did that which resulted in the War Department giving orders to discontinue dredging in this channel. An act was then passed by the State Legislature for the appointment of a Port Commission. Citizens of the city were appointed on this commission, which organized by making M. W. Carruth president and F. C. Bowyer secretary. The commission invited all interested property-owners adjoining the channel to appear to develop the ideas they had with reference to what could be done with the possible water fronts and the reclaimed land. Later the commission determined upon certain essential features of the plan for development, and it was then worked out in detail, so far as the requirements of the War Department made this necessary. The plan was forwarded to the chief of engineers of the United States Army, was approved by him without change, and was then approved by the Secretary of War."

"The plan provides for something over four miles of pier front, with a municipal railroad serving all piers and connected with all railroads entering the city. Streets from 60 to 125 feet wide are planned immediately adjoining the area covered by the pier development to provide for all kinds of trucks and equipment for conveying merchandise. The plans of the War Department were to have 24 feet of water in the channel. A movement is now on foot to have the depth increased to 30 feet, with apparent assurance that it will be secured."

MICA INDUSTRY IN VIRGINIA.

By E. A. SCHUBERT, Mineralogist, Norfolk & Western Railway.

The mica industry is one of growing importance. This valuable mineral is required in increasing amount, in keeping with the rapid application of electrical energy, whether for power, light or such other purpose to which it may be adapted. Thirty years ago the amount of mica required in manufacture and art was very limited. Now it is an industry the extent of which is measured in hundreds of thousands of dollars, and increasing annually.

The first mica mined in the United States came from New England, but the quantity and quality both were deficient. This led to new explorations and the transfer of the major portion of the industry to North Carolina, in which State nearly one-half of the entire amount consumed is being mined.

Some six years ago a number of Pittsburgh capitalists were directed to Ridgeway,



SPECIMENS OF MICA FROM MINES IN HENRY COUNTY, VIRGINIA.

Henry county, Virginia, as offering an attractive field for mica development. After several years of exploration work, the expenditure of much capital and the accompanying of the usual disappointments in mineral development, the stockholders of the Ridgeway Mica Co. finally were rewarded for their patience, energy and money expended by being apprised of the fact that they had a real mine and a good one. They now have driven their shaft to a depth of over 100 feet, find the mica between well-defined walls, having a vein about six feet wide, and are taking out about 15,000 pounds of the very highest grade mica monthly. The largest block recovered weighed over 3000 pounds, but blocks that weigh from 400 to 600 pounds are of frequent occurrence. This mine is reputed as producing the largest and best blocks of mica in the United States, some sheets cutting in the clear as large as 20x24 inches. It is free from iron and other injurious elements, and commands a high price in the open market.

This company has installed a modern equipment, and is directing the development of its mine along practical lines. They have ample mica blocked out to keep going for a long time, while the vein on which they are working cannot be exhausted within the next 100 years.

For Freeport Harbor.

[Special Dispatch to Manufacturers Record.]

Freeport, Tex., August 27.

Col. C. S. Riche, United States Engineer in charge of the Galveston district, made public here today the information that bids are sought from private contractors for dredging work at the mouth of the Brazos River. No Government dredge being available, the Federal authorities have decided to let out by contract the dredging of this port tempora-

rily suspended because of the loss of the United States dredge Comstock by fire last winter. The work to be done is the dredging of the old turning basin at the wharf of the Velasco Wharf & Warehouse Co. to its original dimensions, 400 feet wide, 600 feet long and 18 feet deep, and dredging the old channel extending between the jetties from this turning basin to the 18-foot depth in the Gulf. The channel is to be 1500 feet wide and 18 feet deep.

To Develop Ozark Section.

BANKERS, FARMERS AND THE FRISCO SYSTEM IN A CO-OPERATIVE MOVEMENT.

[Special Correspondence Manufacturers Record.]

Springfield, Mo., August 23.

In furtherance of a plan for co-operation of bankers, farmers and the St. Louis & San Francisco Railroad in developmental work an organization known as the Ozark Bankers Development Committee was organized at a meeting here attended by 102 bankers of the Ozark section.

The purposes of the organization are to encourage immigration of the right class, to promote agriculture in the Ozarks along scientific lines, and to co-operate with the farmers in perfecting and operating a marketing organization covering the Ozarks.

For each of these purposes a committee was selected. Each of these committees is now actively at work.

This movement on the part of the bankers is in many ways unlike any other effort of its kind, and is notably different, in that it was not merely a meeting to declare a sentiment and then go home.

Mr. M. B. Clarke, cashier of the West Plains Bank, who is president of the organization, is the highest type of a banker, as well as a man, a New Englander by birth, well balanced and full of initiative.

The thing the organization is most anxious to emphasize, and the one that has developed to the entire satisfaction of the organizers, is the important part the local banker can and should play in the development of any country.

The literature to be gotten out dwells specifically on the purpose not only to invite immigration, but to see that the newcomer is properly advised along business lines, as well as agricultural, after he arrives. In other words: The banks in each town are a local committee to deal not only with the farmers already on the land, but the newcomer as he arrives. Part of the plan is this. On the arrival of the newcomer to make his investigation he will call on one agent, who will take him to the local bankers' committee. They will inquire into his circumstances and his resources and will determine what kind of a farm proposition he is best able to handle in a business way without involving himself to the point where he will likely fail, as has been the case in a majority of instances in all the new territory on our lines.

After it has been determined what is best for the newcomer, he will be shown different tracts of land, and what he purchases will be sold to him at a price that will not burden him. During all this time the local banker is his advisor. After he has come upon his land the agricultural department of the Frisco system takes him in charge, and with the bankers assists him in developing his land after a manner that will insure him a profit.

The whole affair is strictly a business proposition, and not "boom;" neither is there a chance of the newcomer falling into the hands of any land speculators. The local banker will at all times stand between him and anything that is not for his good.

The marketing feature of the organization is going to be a very important one, and in this the banker is a most vital factor. Within a year the local bankers' committees will practically supervise the marketing of products. This will insure marketing in a business way. Not only this, but the bankers' committee as a whole will organize the respective localities

into local marketing concerns, each of whom will be a part of the one marketing machine, covering the entire Ozarks, with headquarters at some convenient place, but always in touch with and acting on the advice of the bankers.

In this connection the agricultural department of the Frisco is already at work on packing and grading schools for farmers in connection with their perishable products, such as fruit, the first object being to create a standard grade and pack for the Ozark section, so that a package of fruit bearing the stamp "Ozark" will have its quality and grade guaranteed.

Success has already been had in this connection with the peach movement, which has just closed, and amounted to a little over 2000 cars, and on next Tuesday will begin the packing and grading schools of instruction in the apple belt.

It will thus be seen that this is a definite movement between the farmers, the bankers and the railroad, and, by continued co-operation on the part of these three factors, there is no reason why results the country is after may not be reached. Within a few days all the committees of the organization will begin their active work. Their membership is as follows:

Livestock—R. E. McMahon, Seymour, cashier Bank of Seymour; T. E. Young, Alton, president Bank of Alton; C. L. V. Randall, Eminence, cashier Shanon County Bank; Chas. W. Gillman, Lockwood, president Bank of Lockwood; John C. Harlan, Gainesville, cashier Bank of Gainesville; M. T. Easley, Fairplay, cashier Farmers' Bank of Fairplay; John Pillman, Arlington.

Agriculture—E. J. Green, Mountain Grove, cashier First National Bank; G. W. Wilson, Everton, cashier Bank of Everton; J. T. Morris, Sparta, cashier Bank of Sparta; A. M. Gurley, Purdy, president First National Bank; J. E. Lang, Carthage, cashier Central National Bank; J. H. Smith, Rolla, cashier Merchants and Farmers' Bank; Edwin Harrison, Greenfield, cashier Dade County Bank.

Marketing of Farm Products—Joseph Knoerley, West Plains; J. M. Huff, Koshkonong, vice-president Koshkonong State Bank; Walter A. Coon, Republic, president Bank of Republic; Wm. A. Rhea, Peirce City, cashier Lawrence County Bank; J. C. Ault, Cassville, cashier Barry County Bank; C. F. Christeson, Dixon, cashier People's Bank; S. F. Lumm, Lebanon, cashier State Bank.

Dairying—P. P. Lewis, Crescent; J. A. Chase, Mountain Grove, president Mountain Grove Bank; J. W. Coleman, Marionville, president Bank of Marionville; D. N. Stafford, Seneca, cashier Bank of Seneca; W. B. Sanford, Springfield, cashier Holland Banking Co.; John Hosmer, Marshfield; W. W. Young, Salem, cashier Bank of Salem.

Immigration and Publicity—Charles M. Knapp, Rolla, cashier Rolla State Bank; J. B. Thomas, Willow Springs, president Bank of Willow Springs; E. C. Coulter, Neosho, cashier First National Bank; Willis W. Lehnhard, Monett, cashier First National Bank; C. P. Patton, Cabool, cashier Bank of Cabool; D. N. Stafford, Seneca, cashier Bank of Seneca; Bert Gardner, Springfield, cashier Merchants' National Bank.

Advisory—Tom Randolph, St. Louis, president National Bank of Commerce;

R. S. Hawes, St. Louis, vice-president Third National Bank; C. G. Hutchinson, Kansas City, cashier First National Bank.

NASHVILLE MANUFACTURES.

Arrangements Completed for a Permanent Exhibit.

[Special Cor. Manufacturers Record.]

Nashville, Tenn., August 24.

With the allotment of spaces by means of drawings made August 22 final arrangements were completed for the permanent exhibit of Nashville-made goods to be maintained by the Nashville Manufacturers' Association. A five-story building has been leased for a period of three years, and 150 spaces, or practically all that are available, have been contracted for by the members of the association. The largest single contractor has six spaces, with an application in for an option on five additional spaces. The building will be opened to the public September 1, and from that day until October 4, continuing through the State Fair, the exhibit of the manufacturers will be augmented by a complete working model of the Panama Canal, 80 feet in length, and showing in minutest detail every form of masonry and mechanism comprising the great ocean-to-ocean highway.

This permanent exhibit of the Manufacturers' Association is the result of the seed sown 15 years ago when Mr. H. W. Buttorf of the Phillips & Buttorf Manufacturing Co., veteran business man and promoter of the city's good, conceived the idea of combining the public market-house with quarters for an exhibit of not only Nashville-made goods, but also of Tennessee's resources. His plan was not carried out, but the idea remained, and was agitated and grew until a few months ago, when definite steps were taken at a joint meeting of committees from the Board of Trade and the Manufacturers' Association.

The building in which the exhibit is to be housed has a depth of 180 feet and is situated in the heart of the business district of the city. Each floor permits of two rows of exhibits, with an 11-foot aisle between and with each space 10x7½ feet. It is proposed to use the top floor as an assembly-room for the use of the Manufacturers' Association and kindred associations, and conveniences will be provided for meetings of every character. Passenger elevator service will make the assembly-room readily accessible. Telephone facilities, restroom, parcel-checking department and other conveniences are provided for the use of visitors. The decorations of the five floors are uniform and permanent and fully in keeping with the handsome displays.

Many of the exhibitors are now contemplating maintaining their exhibit space as official downtown headquarters, and it is generally admitted by all the members of the association that the building will soon become headquarters for the united interests. The Nashville Traffic Bureau, an organization which handles in expert manner the freight and traffic questions arising in the course of business, will have its headquarters in the building as soon as its present quarters can be subrented. There will also be maintained in the building the facilities for refunding fares to out-of-town purchasers under agreements made by the Manufacturers' Association or the Retail Merchants' Association.

The members of the Manufacturers' Association and the allied organizations interested in this movement for a permanent exhibit consider that the speedy outcome will be a new building for the joint housing of the Manufacturers' Association, the Retail Merchants' Association,

the Board of Trade, the Industrial Bureau, the Business Men's Association, the Commercial Club, the Traffic Bureau, the Real Estate Exchange, the Builders' Exchange, the Grain Exchange and the Rotary Club. JOHN W. HUTCHEN.

Union Sulphur Company in Europe.

Under a lease for 25 years of a tract of land accessible to one of the harbors at Rotterdam, Holland, the Union Sulphur Co., which operates the vast deposits of sulphur in Southwest Louisiana, has completed the building of a large storage warehouse at Rotterdam, and has installed modern machinery for handling the sulphur from the ship to the warehouse. One cargo has already been delivered. The company proposes to build a grinding mill on the tract. The facilities at Rotterdam are provided simply to expedite the distribution of the sulphur, and has no special bearing upon operations in Louisiana except to the extent of the increased sales that may be made through Rotterdam. No increased plant or extension of workings in Louisiana is expected to be made necessary by this Rotterdam distributing station. The Union Sulphur Co. has also storage and distributing facilities at Hamburg, Germany, and Marseilles and Cette, France. These plants are supplied by the company's own fleet of vessels.

Soya Bean Oil.

Attention has repeatedly been called in the MANUFACTURERS RECORD to the soya bean as a possible source of wealth for the South. The advantages of its cultivation through the improvement of the soil and the value of the bean in the manufacture of oil have been pointed out from time to time. A recent issue of the *Times-Union* of Jacksonville, Fla., reports that L. P. Nemzek, representing the educational bureau of the Paint Manufacturers' Association, has been making a trip through the South urging the cultivation of the soya bean on the ground that oil made from this bean is a good substitute for linseed oil in paint work, and that the supply of linseed oil is decreasing. A few weeks ago we published a report from abroad which indicated the possibility of the soya bean becoming an active rival of cottonseed for the production of oil. The subject is one which deserves the careful study of the people of the South.

For a Canning Factory.

Of 25 citizens of Greenville, Fla., meeting for the purpose of organizing a canning factory, 20 expressed willingness to subscribe for more or less stock and to plant 171 acres of canable produce. An investigating committee was named as follows: J. W. Grubbs, M. W. Marshall, J. W. N. Bishop, T. M. Coon and H. W. James, secretary. This committee will call another meeting some time early in September, at which time they will make their report and have some timely remarks from Mr. Fant, assistant industrial agent for the Seaboard Air Line Railroad, Jacksonville, Fla., and Deane Vernon of Gainesville, Fla. At this meeting it is expected that stock subscriptions will be taken and business begun in earnest with view to having the plant in operation by January 1, 1914.

Secretary J. M. Vollmer of the Builders' Exchange of Louisville, Ky., informs the MANUFACTURERS RECORD that the proposition of his organization, looking to the standardization of building plans and specifications designed to eliminate unnecessary hazards, has been endorsed by 85 per cent. of building organizations, by surety agents and by the National Association of Credit Men.

ECONOMIES IN QUARRYING SLATE IN VIRGINIA.



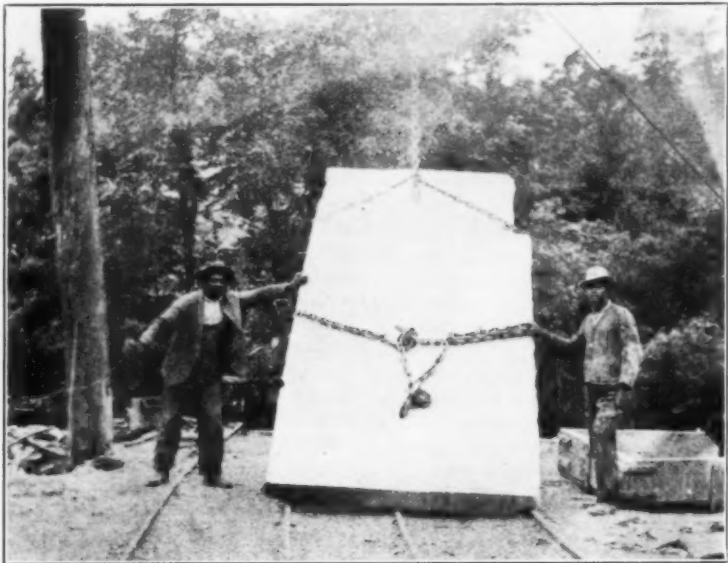
AN IDEAL "SHOT" WHEN USING POWDER, BUT INVOLVING GREAT WASTE OF MATERIAL.



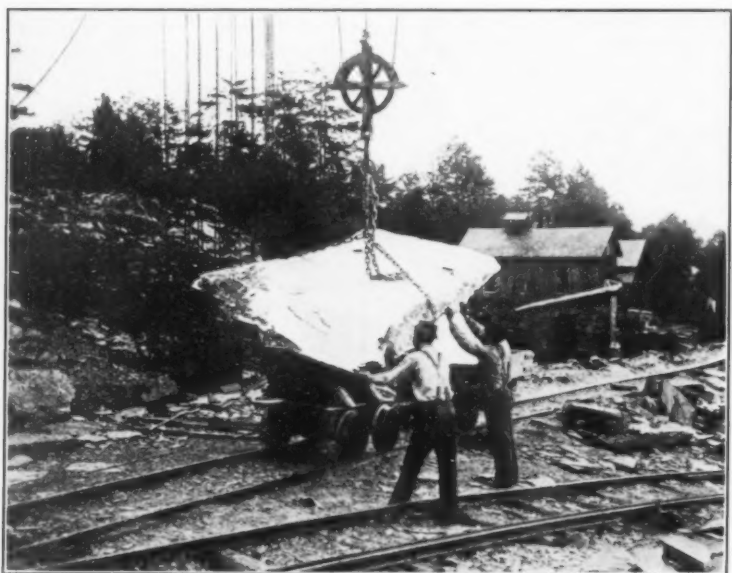
ECONOMY IN HANDLING SLATE QUARRY WITH UNDERCUTTERS AND CHANNELERS.



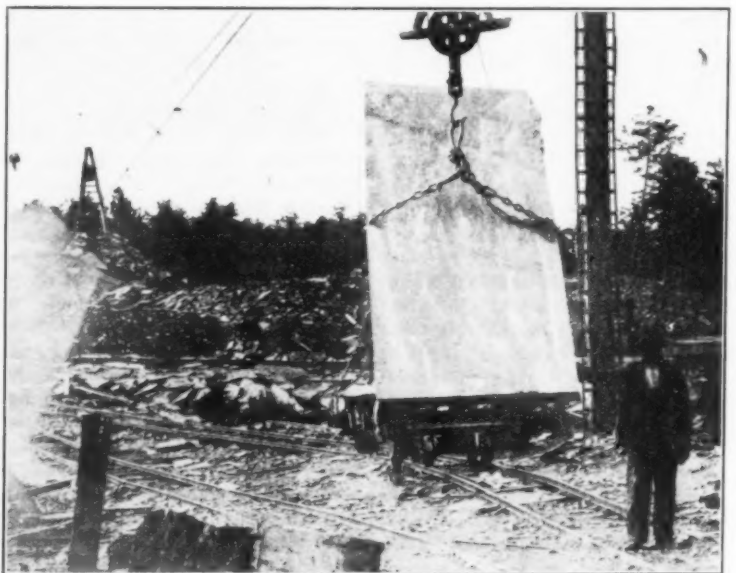
SHOWING OLD METHOD OF QUARRYING BY BLASTING, WHICH BROKE SLATE INTO SMALL PIECES.



CHARACTER OF BLOCK OF SLATE OBTAINED BY MODERN METHOD OF UNDERCUTTING AND CHANNELING.



JAGGED SHAPE AND BRUISED CONDITION OF BLOCK OF SLATE BLASTED UNDER EARLIER METHODS.



KIND OF BLOCKS OBTAINED WHEN CHANNEL MACHINES AND UNDERCUTTERS ARE USED.

To eliminate the waste consequent upon antiquated methods of quarrying slate by blasting and milling it with plugs and feathers, the Standard Slate Corporation installed some time ago in its quarry at Esmont, Va., channel machines and undercutters. Because of the condition of the beds in the quarry, these machines are used most profitably. In place of the old plug and feather methods, the company installed at first circular saws to cut the slate into required strips. But this was found to be too slow a process, and so a modern gang saw was installed, which permits the cutting of the whole block of slate at one operation, thus saving time and labor. At the quarry the slate is cut into blocks of such a size as to make as little waste as possible. The blocks are usually from 10 to 15 tons in weight, and contain from 20 to 30 squares of slate each. Hoisting engines handle these large blocks and dinky locomotives transport them to the mill. By these modern methods recovery of marketable slate is in the neighborhood of 66 per cent., whereas formerly only about 15 or 20 per cent. was recovered. The accompanying illustrations offer opportunity to compare results of the old and new methods.

From Coal Fields to the Gulf

TRANSPORTATION EXPEDITED BY WARRIOR-TOMBIGBEE RIVERS LOCKS AND DAMS.

[Special Correspondence Manufacturers Record.]

Tuscaloosa, Ala., August 22.

Three dams and locks out of the total number of 17 remain to be completed, when slack water navigation, with a minimum of six feet, will have been provided from Mobile to the heart of the Warrior coal fields. This navigable waterway will be 444 miles in extreme length. The work has been under way for 25 years, and under favorable circumstances it will be finished during 1914. The estimated cost is \$8,675,000, according to the last published report of the Government chief engineer having the work in charge. It

considerable development of commerce on the rivers of this system. Cotton, however, dwarfs every other item of freight carried, while coal is of almost insignificant importance, standing well-nigh at the bottom of the entire list of articles transported. Beginning some time in September, it is proposed to inaugurate regular shipments of coal from the company's mines, when coal shipments will be expected to show a tremendous advance in the reports of traffic on the river. The company has built tipples at a point on the Black Warrior 10 or 12 miles above

loosa, all the way to the Gulf, there was navigation, without any locks or dams, except in low water or for about six to eight months in the year. With the completion of all the locks and dams there will be a navigable stage of water every month in the year.

The Tuscaloosa locks and dams, the first of any to be constructed, were begun in 1888 and finished in 1895-96. They are not far apart, and have a combined lift of 29 feet. Originally there were separate projects for the improvement of the rivers, the Warrior improvement being one and the Tombigbee a separate one. Locks 10, 11 and 12 were then called 1, 2 and 3 of the Warrior River improvement project, but under the consolidation of the various projects into one the numbering begins at the lowest one, 111 miles above Mobile, and continues consecutively to the end of the improvement, lock 17, 388 miles above Mobile.

The work has been done under the continuing appropriation plan, and generally the most important work has been taken up first and pushed to completion. However, difficulties have been encountered, some of which have been due to failures in carrying out contracts promptly, which have delayed the work very seriously in some instances. Now, however, everything appears to be in entirely favorable condition, and no interruption is anticipated in the steady progress of such work as remains to be done.

There is a peculiarity in nomenclature which must needs be noted. Coming out of the center of the Great Warrior coal basin, the Mulberry and Locust forks unite to form the Black Warrior River. When it reaches the Tuscaloosa wagon bridge the Black is dropped and the river is then called the Warrior until it unites with the Tombigbee, one mile above Demopolis, 130 miles down from Tuscaloosa. It is Tombigbee then till it strikes the Alabama River, 45 miles above Mobile, where both lose their names, and it is Mobile River till it strikes the sea.

Lock No. 1 is 111 miles above Mobile, and the river here has become Tombigbee. Although not entirely completed till September, 1909, Lock No. 1 was opened to navigation in the September before. It has been in continuous operation since

feet of water over the lower miter sills at low water. This is the standard size for all the locks, and they are of the same dimensions throughout. There is a lift at this lock of 11 feet.

Lock No. 2, 72 miles above No. 1, is being completed under a contract with Brewer & Jones, just made, the original contractor failing to complete the job. The lock and abutments are finished, and work is being done on the dam. It is expected that the work will be entirely completed during 1914.

Lock No. 3 is 23 miles above No. 2. It is being built by the Government. About 200 men are at work, and rapid progress is now being made. Unless unforeseen circumstances occur, it will be finished next year.

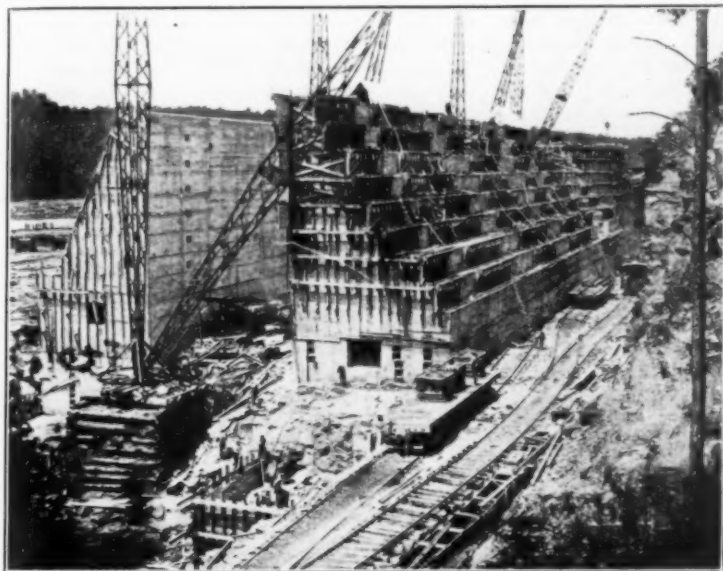
Lock No. 4, 25 miles above No. 3, is at Demopolis, 231 miles above Mobile. It was completed and opened for traffic in 1908.

All the locks and dams from there up to lock No. 15, 19 miles above Tuscaloosa, are completed and in operation. They have been built at various times between 1902 and 1910.

At Tuscaloosa the river begins to be shut in between hills and high banks, and higher dams and lifts are the rule. From lock 2 to 9 the lift is 10 feet in each case. At 10, 11 and 12 there is a combined lift of 29 feet. At 13 there is a 12-foot lift; at 14 and 15 a 14-foot lift; at 16 a 21-foot, and at 17 a double lock of 31½ feet each, or a total lift of 63 feet, with a dam, of course, of that same height. The elevation here is more than 200 feet above mean level at the Gulf.

Lock 15, which is completed, backs water up to 16, six miles farther up the stream. Lock 16 is 94 per cent. completed, and could be finished up any time, but is purposely left incomplete to facilitate the work at lock 17. At the contractors' request, gaps have been left in the dam so as not to back water up to 17, which is two miles up the stream from 16.

Altogether, the most extensive piece of work on the job is the great dam and the locks at 17. Work is progressing steadily, however, and the contractor, B. H. Hardaway, expects to have his end of the great improvement finished up with the rest of



CONSTRUCTION OF LOCK AND DAM IN BLACK WARRIOR RIVER, ALABAMA.

is possible that the final bill will add something to this estimate, but at \$9,000,000, or considerably more, it is now everywhere conceded that benefits far and away above the cost of the improvement will be immediately conferred on the entire section, with a permanent incentive to developments of greatly varied kinds wholly beyond computation.

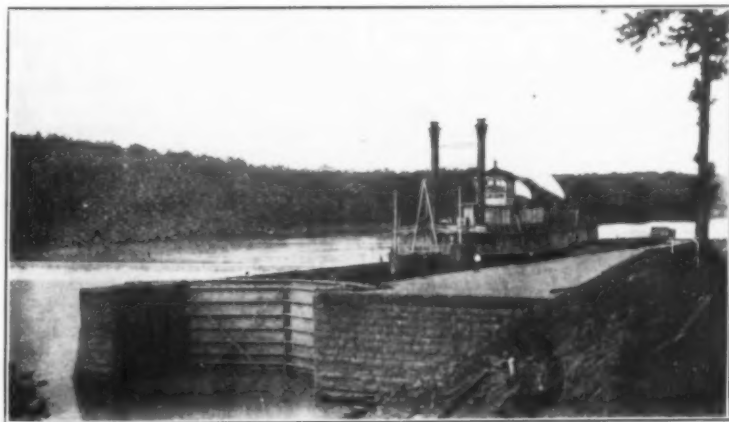
Although the improvement of the Tombigbee and the Warrior has been under discussion, and has had strenuous champions since early times, there have been skeptics till recently as to the value of the benefits to be realized. It is not too much to say that the very last prop the objectors had has been removed by the demonstration that a revolution is to be brought about in shallow water transportation by the type of self-propelled steel barge introduced to Southern waters by John H. Bernhard of the Alabama & New Orleans Transportation Co., New Orleans. Of 1000 tons capacity, inexpensive in operation, able to thread the most tortuous way of any navigable stream, and to keep going at a rate of from seven to nine miles an hour, this type of boat, an adaptation of such as have for some time been in use on the highly developed water transportation lines of European rivers, will shortly be installed for regular service between New Orleans and the coal mines of a company subsidiary to the transportation company, or at least owned largely by identical interests, and Alabama coal will be carried to Mobile, to New Orleans and beyond, with return cargoes of merchandise for all way points, and all at schedule charges materially below railroad rates.

With such improvements as have already been made, there has been a very

Tuscaloosa, operating a short line of railway to the mines, and installing equipment and facilities for mining a large tonnage of coal.

With the completion of the entire system of locks and dams an immense territory of coal lands will be made accessible to river transportation. Lock 17 will give navigable back water for 56 miles, 20 up the Black Warrior and 36 up Mulberry fork. It will also give 16 miles up the Locust fork and 5 up Valley Creek. Government reports are to the effect that there are fine marketable seams of coal in this territory, and that the Locust and Mulberry forks, within the territory affected, drain the most important part of the Warrior coal basin. In seams ranging between 25 and 72 inches, there is estimated to be nearly 2,500,000,000 tons of coal available for shipment over the Locust and Mulberry forks, counting as available for river shipments the coal in the area extending for five miles on each side of the Locust and Mulberry forks, below Saunders Ferry and Five-mile Creek. The same Government reports declare that this territory is in the heart of the most valuable coal basin in the South. At varying depths there are found the several seams of coal that are worked in the Birmingham district, including the Pratt seam, which here underlies 106,880 acres, with an average thickness of 38 inches. Based on 1000 tons an acre for each foot of thickness of coal, a total is given this one variety amounting to 338,488,000 tons.

The first locks built were those just above Tuscaloosa to overcome the Tuscaloosa Falls. Previously the river was closed to navigation above Tuscaloosa on account of these shoals. Below Tusca-



STEAMBOAT PASSING THROUGH LOCKS IN BLACK WARRIOR RIVER, ALABAMA.

then until July 23, when it was shut down for repairs, in accordance with the rule of the Government to shut down its locks once in five years for pumping out, repairs and improvements. From three to six weeks are counted on as the time necessary to do this work. It is stated that 15,000 tons of freight went through these locks in the 23 days of July they were open for business. There are advocates of the double-lock system, which would allow business to go on all the time. The size of the lock is 285 feet available length, 52 feet width and 6½

feet. About one-third of the cyclopean masonry has been laid, and an elaborate equipment and construction camp have been installed for expeditious, efficient prosecution of the work.

When local conditions have suggested it, a dam here and there has been built of masonry, but as a general thing, the construction throughout has been of concrete.

It would seem an altogether conservative opinion that Tuscaloosa will be immeasurably benefited by the inauguration of reliable all-the-year navigation on the

Tombigbee and Warrior rivers. Such is the expectation among the people here, and already, a year or more in advance of the complete opening up of the river to the heart of the Warrior coal basin, Tuscaloosa is showing a degree of life and alertness such as has not been known here for a very considerable number of years. Faith in an imminent development of importance for all this territory is indicated in the new buildings constructed, in the paving with asphalt of the principal streets, the installation of the most modern metropolitan system of street lighting, and in a general "sprucing up" in the appearance of the city and a confident, expectant tone in the conversation of the people.

It is believed here that with the right kind of aggressive leadership in the early days there might have been built up at Tuscaloosa a great iron and steel making center of the South, and the disposition now seems to be to take a fresh start in the direction of bringing about a development along the same lines. There is even heard so optimistic a note as declarations that now may be realized a dream of other days and Tuscaloosa become the Pittsburgh of the South. Nor are such expressions heard from exuberant dealers in lands and town lots. Sober-minded men of mature years, citizens and responsible men of affairs, speaking simply the conclusions at which they have arrived, pronounce the conditions here to be fundamentally favorable for a development of exactly that sort and size. Incidentally, and in this connection, Tuscaloosa is a candidate for the proposed Government armor-plate works, and proposes to make as vigorous a presentation of her claims as can possibly be done when the time arrives for a location to be made.

The fact is pointed out that the local plant of the Central Iron & Coal Co., operating furnaces, pipe foundry and coke plant at Holt, a few miles up the Black Warrior, is turning out 250 to 300 tons a day of such superior pig-iron that it commands a premium of \$1 to \$1.50 a ton in the iron markets of the country. Made from the brown ores of Tuscaloosa county, the pig is low in phosphorus and high in manganese. It has great tensile strength, and is particularly desirable for castings, for pipe and for conversion into steel. The supply of high-grade iron ores, the fields being located in the eastern part of Tuscaloosa county and within easy shipping distance of Tuscaloosa, is said to be ample for extensive operations throughout a long term of years.

As for coal, authorities concede that the whole series of coal beds that occur and are mined in other counties in the State lie below the surface in Tuscaloosa at depths varying with the locality; some near the surface and others at depths of from 400 to 900 feet. "The entire series of coal beds of the Warrior basin outcrops in a narrow belt near the edge of the valley which forms the eastern boundary of the county," the State geologist is quoted as saying, "so that these lower seams, including the Pratt, Blue Creek and other celebrated veins, can be mined by slopes for a limited depth, beyond which, of course, resort must be had to shafts." Billions of tons of coal in workable seams are thus found to be located in Tuscaloosa county.

Immense beds of limestone for fluxing are found between the upturned coal measures in the county's eastern valley, and beyond these, to the east, are found great deposits of brown iron ore. With these vast deposits in close proximity it is declared altogether feasible to bring about a development that will place Tus-

caloosa in the front rank of iron and steel producing centers.

Tuscaloosa was once the capital of Alabama, losing it to Montgomery in 1846. It is therefore an old-established, staid and stable city, with many old Southern mansions, embowered in a forest of live oak and other huge old trees, and as it has always been the seat of many schools and colleges, there is a notable degree of culture and refinement here. The modern development and growth of the city are of recent years, the present impetus having started since the construction of the locks in the Black Warrior, just above Tuscaloosa, to overcome the Tuscaloosa Falls. The greatest activity has occurred, however, within the past few years.

The census population of 1900 was 5004, of 1910, 8407, while today, including those at Holt and Kaulton, the local estimates are about 15,000. It is felt that a momentum has now been gained which promises to gather force as it goes along, till the achievements scored are many and important. A Chamber of Commerce with a very creditable number of members is energetically striving to advance the city's interests in every way.

The Louisville & Nashville Railroad has recently built a line from Birmingham and Bessemer, an extension of great advantage to the city and section. A branch of the Mobile & Ohio, extending from Columbus to Montgomery, and the Alabama & Great Southern are the old lines serving Tuscaloosa. Several other railroad projects are discussed, with more or less prospect of realization. The Gulf, Florida & Alabama, to come north from Pensacola, is planned to pass through Tuscaloosa en route to Jasper. The Illinois Central is considered certain to adopt a survey for its long contemplated line east from the main line in Mississippi to Birmingham, that passes through Tuscaloosa.

Along North River, the principal tributary of the Warrior, and running south through the center of the county, some Birmingham and other capitalists have recently bought up a tract of 25,000 or 30,000 acres of lands richly underlaid with coal. Prospecting has developed, so the statement goes, that several square miles are here underlaid at a depth of 400 or 500 feet, with a seam of coal 50 to 80 inches thick, which appears to be identical with the Carona seam. A survey has been made for a road running through this coal field from Tuscaloosa to a junction with the Illinois Central at Haleyville.

Having great growths of timber in Tuscaloosa county, an extension of an already important development in lumber manufacturing is expected. Outside interests are negotiating for the purchase of a large tract of hardwood to the northwest of Tuscaloosa. The Kaul Lumber Co. is already operating a modern mill at Kaulton, a suburb of Tuscaloosa. The mills are of reinforced concrete, and have a capacity of 175,000 feet a day. The company's holdings provide a 30-year supply at this rate of cutting. A model town has been built up for the accommodation of the workers in the mills. Other sawmills are also operating in this vicinity.

There has been a very considerable agricultural development in this section in recent years. There is a large area of famously fertile territory, not only in Tuscaloosa county, but all along the western tier of counties. Changed conditions of farming have occurred, and stock raising, with improved breeds of cattle and hogs, is being more generally engaged in. The Cochrane road, now 200 miles long, coming north from Mobile through the ex-

treme western tier of counties, and at present terminating at Reform, Pickens county, has become known as the alfalfa road, so extensively has alfalfa growing and stock raising become in the territory served. The same improvement in farming conditions is to be found in Tuscaloosa county generally. Truck and dairy farming are largely engaged in in the vicinity of Tuscaloosa, and as nearly every variety of grain, forage crops, vegetables, fruits and berries thrive here, while at the same time a cotton crop of over 25,000 bales is raised in the county in an average year, there is a most substantial basis for permanent prosperity in agricultural and kindred interests alone.

The gas and oil fields of Fayette county, where a number of gas wells have been brought in and promising oil indications found, are 35 miles to the north. The development of these fields has been retarded through financial complications, but what has been done there establishes the existence of a field that justifies further and more complete exploitation.

As indicating the great variety of resources on which to base a diversified development here, the practically inexhaustible marble beds of the Cahaba, less than 35 miles to the southeast, may be mentioned. Outside of marble, oil and gas, with high-grade iron ore; coal enough, and good coal, to last for centuries; forests of oak, gum, hickory, poplar, cedar, cypress and pine; all that could be asked in fertility of soil; a good climate all the year round; railway transportation facilities that are good and which are being added to, and slack-water navigation to the sea, with a water transportation line soon to be inaugurated that is the most scientific system ever introduced in the South for carrying cheaply all kinds of goods, and particularly bulky units, from the interior to shipside at the ocean ports of Mobile, Pensacola, Gulfport and New Orleans, it certainly would appear that Tuscaloosa has a chance. Surely a big development, if not all that is talked about here, ought to follow persistent, intelligent and adequate efforts on the part of the people of this place.

ALBERT PHENIS.

First Steam Vessel Built at Pascagoula.

Pascagoula, Miss., August 23.

Editor Manufacturers Record:

Three years ago the Federal Government acquired a piece of land on Lowry Island, to be used for marine slits in which to haul out for repairs the small craft used by the Government, such as pontoons, tugs, etc. The slits have just been finished. An account of their construction has already appeared in the columns of the MANUFACTURERS RECORD. Today the Government purchased a piece of land 200x400 feet on Lowry Island,

just north of and contiguous to the piece of land acquired in 1910. The land lies 300 feet north of the Louisville & Nashville Railroad bridge, and on it will be established marine ways to cost \$16,000. The ways will be large enough to accommodate the largest vessel that the Government has in these waters.

A steamer has just been built here for the Bluefield Fruit & Steamship Co. of New Orleans, and named the *Rey del Rio*. She was designed and built by T. C. Gatti of this city, a native of Rome, Italy, and has a length over all of 111.5 feet, 22 feet beam and 9 feet depth of hold, mold measurement, and is fitted for electric lighting and searchlight. She has twin screws with fore and aft action, and her machinery was furnished by the Marine Iron Works of Chicago, Ill. She cost \$32,000 complete, and as soon as she is accepted will be sent to Bluefields, Nicaragua, to be used in the fruit trade. Pascagoula has long been famous for shipbuilding, and some of the noblest two-masted and three-masted schooners that ply the waters of the Gulf of Mexico were built and equipped here.

Though the shipyards of Pascagoula have turned out innumerable hulls for tugs, barges, etc., and schooners, the *Rey del Rio* is the first steam vessel ever built and equipped at this place.

CHARLES E. CHIDSEY.

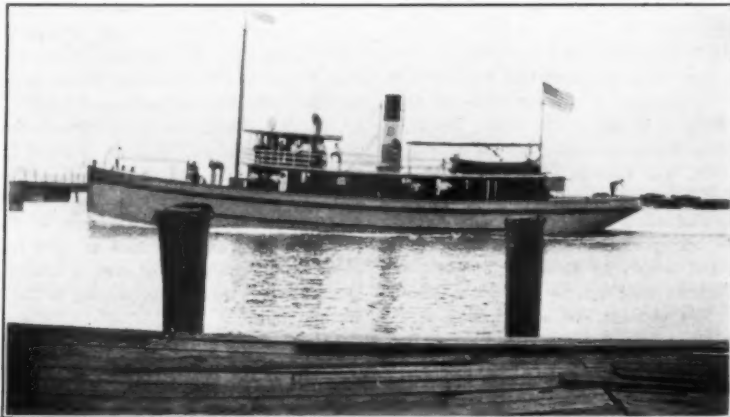
Russian Cotton.

Consul-General John H. Snodgrass, Moscow, writes in Daily Consular and Trade Reports:

"The Moscow Cotton Exchange has supplied this consulate-general with some valuable data in regard to Transcaucasia, a section hitherto unknown in cotton annals. In 1911 there were 336,555 acres planted in cotton, yielding 29,275 long tons of fiber.

"The largest area of cultivation and the largest crop of fiber were in the Province of Yelizavetpol, where the cultivated area was 143,910 acres, and the crop amounted to 12,030 long tons. In the oldest cotton district of the Caucasus—Erivan Province—the area under cultivation did not exceed 108,000 acres, the crop amounting to 10,805 tons. In Baku Province there were 63,720 acres, yielding 4985 tons of clean fiber; in Tiflis Province, 13,500 acres, with a crop of 1100 tons; in the Province of Kutais, 7425 acres, yielding 355 tons.

"According to the calculations of the Caucasus water inspector, 710,100 acres might be irrigated from the Arax and Kura rivers, possibly yielding 64,500 to 80,650 long tons of fiber. Thus, the area of cotton culture in Transcaucasia might be extended to 1,047,600 acres, and the crop, calculated at the present average, might approximate 428,600 bales. This yield in itself would satisfy one-half of the present requirements of the Russian mills."



FIRST STEAM VESSEL BUILT AT PASCAGOULA.

Street and Road Improvements in Florida.

By C. D. CLOUGH of Lakeland.

Probably in all the Southern States, Florida is the youngest in growth, inasmuch as it was not classed among the well-established States until a few years ago, yet at the present time there are probably more public improvements being made within the boundaries of Florida than in any other of her sister States in proportion to population. There is scarcely a town of any importance in Florida but what has already made such improvements or is making rapid strides toward bringing them about. The establishment of automobile highways throughout the State have stimulated the campaign for better roads, and many of the more populous counties are preparing to build many miles of vitrified brick-paved highways, making it possible to cover the entire distance from Tampa to Jacksonville, 240 miles, in less than one day, while at the present time it requires a clever driver and a good car to make the trip in two days.

On every hand among the progressive towns and cities the cry for good roads can be heard, and while many of the people have not yet made up their minds to vote for a heavy bond issue to make roads that will last a half century, they appreciate the fact that nothing will bring the farmer closer to his home market than good hard highways. In addition to the road building, the people realize that good streets are required, and wherever possible to do so the towns and cities are issuing bonds for the purpose of making these public improvements.

Among the towns and cities that have issued bonds for street and road improvements during the past year, or will in the near future expend vast sums in this direction, are the following:

Punta Gorda, situated on the shores of Charlotte Harbor, in De Soto county, will soon hold an election to vote on the issuance of \$100,000 for sanitary sewers, street paving and water-works.

Lee county, at the extreme end of the peninsula, with Fort Myers as its capital, will consider the issuance of \$200,000 of bonds for hard roads to be extended throughout the county.

Sarasota, in Manatee county, a practically new section, has issued \$40,000 of bonds for street paving, and work will probably commence soon.

De Soto county, with Arcadia as the county-seat, will probably bring before the people at an early date the issuance of \$500,000, out of which the people expect to build 250 miles of brick roads.

Pasco county, with Dade City as its capital, and perhaps one of the smallest counties in the State, will probably issue \$50,000 of good-road bonds in the near future and build hard-surface highways over the larger portion of the county.

Bartow, in Polk county, has recently issued \$50,000 of bonds for public improvements, such as street paving, etc. Work has already commenced.

Orlando has recently issued \$75,000 of sanitary sewer bonds and also for additional paving, while Orange county has declared itself in favor of a large sum of bonds, the funds derived therefrom to be expended in building roads of vitrified brick.

The adjoining county (Seminole), which was taken from Orange county by an act of the past Legislature, with Sanford as the seat of justice, is also arranging to spend a large sum in building roads.

Duval county, where is located the city of Jacksonville, will build many miles of brick highways. Among the first to receive consideration is a road from South Jacksonville to the St. John's county line, and then from South Jacksonville to Pablo Beach. There will be expended in the work \$1,000,000 received from bond issue. In addition to the above-named roads, there will be highways built in all sections of the county.

Palatka is soon to build three miles of concrete sidewalks. In addition the same city has spent something like \$75,000 in vitrified brick street paving.

A plan is now on foot for the City Council of Lakeland to award a contract for the building of about 50 miles of additional concrete sidewalks, the same to be assessed against the abutting property. The scheme is meeting with favor by the taxpayers, and the plan may extend into other towns nearby. The ordinance in question carries with it the right of the property-owner to demand that he be given a term of five years in which to pay for the improvement, the contractors to dispose of the certificates, which are liens upon the property.

By the use of convicts and money derived from the road fund, Polk county is now building macadam roads connecting all the towns. The material used is a low grade of phosphate spread and thoroughly rolled, making a very substantial paving. It will require about 12 more months in which to complete the work of connecting all the towns in the county.

Lakeland is now spending the proceeds of \$150,000 of sanitary sewer and street-paving bonds sold last December. The work is well under way, and will be completed this fall.

Nassau county, with Fernandina as its chief town, will spend \$180,000 in road building, practically providing a hard road in all sections of the county.

Winter Haven district, in Polk county, has issued \$13,000 of bonds for road building.

Braidentown has paved 42,000 square yards of asphalt streets.

Hampton district, in Bradford county, will issue \$25,000 of good-road bonds, and will expend the money in their own district for this work.

Miami, on the east coast, will spend \$60,000 in street and sidewalk building.

Escambia county is to have a number of miles of paved roads, and the city of Pensacola will build 25 additional blocks of street paving.

Dunnellon is spending \$50,000 in sanitary sewers and street paving.

St. John's county will probably spend \$400,000 for good roads, which are to be made of the most durable and substantial material to be secured.

Kissimmee within the past year has spent over \$100,000 in the construction of sanitary sewers and street paving.

Tampa disposed of a one-and-one-half-million-dollar bond issue about one year ago, and the work has been in progress for a long time upon street paving and sanitary sewers.

Hillsboro county will build hard roads over the entire county out of an issue of \$1,000,000 of bonds. Work will be commenced in the early future.

Pineallas county, with Clearwater as the capital, has issued a one-half-million-dollar lot of bonds for good roads.

The subject of good roads is a live one

in this State, and the people will not be satisfied until every town of any consequence will be connected by the best highways to be built.

FOR NATIONAL CONSERVATION.

Wide Scope of the Exposition to Open in September.

[Special Cor. Manufacturers Record.]

Knoxville, Tenn., August 25.

The National Conservation Exposition, which will open its gates to the public on September 1 and keep them open until November 1, will be rendered notable among big shows of the kind for three things:

1. It will be the first conservation exposition of national scope ever held in this country.

2. It will be complete and ready for opening on the opening day.

3. It will open absolutely free from debt.

It is to be an exposition of and schooling in the conservation of natural resources, of energy, of health, of life—of lives generally, and especially of the lives of employees in mines, mills and factories.

Incidentally it will furnish a complete and worthy refutation of the opinion held in the North that the South is looking backward and not forward, is living in the past and not in the present and in preparation for the future, for it will be the first exposition of a general character to be held in all the country with the definite purpose to shape a proper course of future procedure. All the others have been based on past accomplishments—the Centennial at Philadelphia, in memory of the signing of the Declaration of Independence; the World's Fair at Chicago, in memory of the discovery of America; the St. Louis Exposition, in memory of the Louisiana Purchase; the Jamestown show, in memory of the first settlement of the country; even the coming show at San Francisco will be in celebration of the completion of the Panama Canal—all worthy objects, for there is no better way to spur the ambition of man to accomplishment than to remind him of what others have accomplished. But here is to be an exposition of the wonderful resources and advantages of the country, accompanied by practical demonstrations of how best to care for and utilize them for the greatest good of the people now living and those that will come after.

While the greatest benefit, of course, will come to the States of the Southeast, yet there will be benefit in the exposition for the entire country, for, in addition to the fact that there will be a considerable attendance from every section of the country, the effect of the demonstrations will have a reflex effect for good even more far-reaching than their direct influence. The entire country is interested in the conservation of Southern resources and Southern energy, for to the South must the entire country turn for many things now either being rapidly exhausted or which never existed elsewhere.

In the scheme of conservation the conserving of life and health is, I presume, most interesting and important, since the saving and using of all things else are for the benefit and enjoyment of the human race. And of the conservation of life and health that of the life and health of children must take precedence, as it deals with the beginning of things human.

The child-welfare exhibit of the National Conservation Exposition will be in charge of Miss Julia C. Lathrop, head of the Children's Bureau of the United States Department of Labor, who has made a deep study of the conservation of the lives and health of children. There will be shown in this department of the

exposition many screens and charts dealing with the various phases of the work and visualizing as far as possible the subjects to which they are severally devoted. The illustrations now in place are on medical inspection of school children, child diseases, food values, children's institutes and the dependent child, organized charity and the juvenile court, child labor, public recreation, church and school as social centers, toys and play, Campfire Girls and Boy Scouts.

In this connection it is of startling interest to know that, according to Miss Lathrop, there is now more necessity for teaching conservation of children's health and life in the rural than in the urban districts. She says the work has been so well organized and carried forward in the larger cities that the death rate among children in the crowded centers is lower than that in the rural districts. For that reason she considers this a specially good place in which to have an exhibit such as she will show and to give demonstrations of the work, because the South has such a large proportionate rural population.

The women of this city have eagerly taken hold with Miss Lathrop and have organized a Mothers' Association to work in conjunction with her and to get the full benefit of her instruction and demonstrations. The association has more than 500 members.

September 20 will be miners' field day, when there will be a spectacular demonstration of the best methods of conserving life in the mines. Among other things shown on that day will be a series of contests in first aid and rescue between picked teams from the mining regions of Tennessee, Alabama, Kentucky, Virginia and West Virginia. These rescue teams have been trained by Government experts to work with oxygen helmets and other safety appliances, and the rescue contests will be the first of the kind held in the United States. The United States Bureau of Mines will have here also the big steel test tube from the experimental station in Pittsburgh, and will use it in giving an exhibition of the explosion of coal dust. These demonstrations and contests will be in charge of experts from the Bureau of Mines.

From September 12 to September 16 there will be held a congress of farmers, which will doubtless be attended by many agriculturists from all sections. During the meeting of this congress general agriculture, stock raising, fruit growing, dairying and other branches of the farmers' business will be discussed by leading authorities, and the best and most economical methods for improving conditions will be illustrated and demonstrated. A number of the leading agricultural experts of the country will be present and take part in the discussions. The Governors of the various States are appointing leading farmers to come as representatives to the congress, and it is thought the attendance will be large.

On October 9 another meeting of farmers will be held, when it is thought there will be a very large number of farmers present, especially from this State and nearby points in other States. The agricultural show will be on at that time, and also the horse show—the night ring events—as will the corn show and the live-stock show. The meeting will be something like a big farmers' institute, with speakers from numerous places to talk on crop improvement, how to raise better stock, etc. Prof. H. A. Morgan, one of the leading experts in the South on general agricultural matters, will be present and will deliver an address.

At the same time with this latter farmers' meeting there will be a "home-makers' meeting," held in the women's sec-

tion. Too many farmers' wives grow old before their time, and the object of this special meeting is to discuss and demonstrate ways and means for ameliorating the condition of the women on the farm. An expert in household economics will demonstrate the use of numerous well-tried devices for lightening the labor of farm wives—simple, inexpensive things, but well proved as conservers of energy. Among other things it will be shown how easily and cheaply power can be installed in the house for pumping water, churning, grinding and other purposes of domestic economy. The easy utilization of small streams of water for generating such power will be shown.

These are, of course, but a few of the features of the exposition. There will be many others. The Government will install a great forestry exhibit; the railroads will exhibit the timbers and minerals and oils and building stone and cement rock and the myriad other things that abound along their lines. There will be farm products, fruits, flowers, manufactures of numerous kinds, horses, cattle, sheep, hogs, poultry—all kinds of things that enter into the province of domestic, business or manufacturing endeavor. For the end and aim of the exposition is to show what the country has and demonstrate the best manner of using and conserving all useful things to the end that they shall bring the greatest amount of good to the greatest number of people.

The railroads that traverse this section have all joined in to bring about the success of the exposition. They are advertising it far and near; they will have handsome exhibits of the resources of the sections they serve; they will put on rates lower than have ever been given any other exposition, except those at Chicago and St. Louis, and these rates will run from midnight of August 31 to November 1. These rates will cover the country from Washington on the north to Key West on the south, and, extending west, will take in New Orleans, Cairo and Cincinnati.

The newspapers and periodicals of the country have also been liberal in the extension of courtesy to the exposition, and it will lack nothing in advertising that they could be expected to give it. In fact, all things seem to have worked together to make it worthy and to make its worth known.

The grounds whereon the exposition is to be given are as beautiful as could be found anywhere. Chilhowee Park, lying at the outskirts of the city, is naturally one of the most beautiful spots to be seen even in this section of great scenic beauty, and whatever nature lacked in giving it in the way of loveliness man has supplied. Experts, indeed, have pronounced Chilhowee the most beautiful park in the country. It consists, in a general way, of a series of slight hills or ridges surrounding a lake, or, more correctly speaking, a chain of three lakes, filling up the low-lying land in between. Over and about these bridges have been flung and roads and pathways built, threading in and out and between. Skiffs and motor boats ply upon the waters, and bathing pavilions supply facilities for those who desire their use. Looking down upon the waters from the hill summits on every side are the various buildings in which the exhibits are to be made. Chief among these are the Southern States building, the Liberal Arts buildings, the Woman's building, the Land building, with an auditorium for seating thousands of people in connection; the Mines and Minerals building, the Child's Welfare building, the Negro building (for opportunity will be furnished here for the negro to show what he has done and proposes to do for himself), the East Tennessee building. Most

of these buildings are new and the others are newly painted and repaired. All are pure white, of attractive design, and the ensemble is both striking and beautiful.

In addition to the serious things of life hinted at in this article, the exposition will have many attractions that will appeal to the lighter side of human nature. There will be a series of what have come to be described as "midway" shows, located along what is to be known as "Joy Street." There will be Wild West exhibitions, menageries, spectacular and theatrical productions, moving pictures—in short, all the things devised for the pleasure and entertainment of those out for a holiday.

In the two matters of local transportation and boarding accommodations Knoxville seems well able to care for the exposition crowds. The street railway company, by the addition of switches, loops, double tracks and new lines, has put its property in condition to rapidly and efficiently handle many thousands of people, and it is believed there will be no congestion with which it will not be able to deal successfully. A public-comfort committee has listed the hotels, boarding-houses and private residences that will have accommodations for visitors, and there is no doubt of the ability to find good housing for all who come.

The 10 acres of exhibition space provided in the various buildings has practically all been taken, and exhibitors are busily engaged with an army of men in putting their exhibits in place ready for the opening day. From the present outlook it is safe to predict that this will be done in good time, and that the gates will swing open September 1 upon the most thoroughly completed exposition of its magnitude to which the public has ever been invited. And that it will prove a successful and useful addition to the show places of the country seems an equally safe prediction at this time.

GEO. BYRNE.

Search for Diamonds in Arkansas.

Diamonds were first discovered in Arkansas August 1, 1906, near the mouth of Prairie Creek, in the vicinity of Murfreesboro, Pike county, and since that time approximately 1375 stones, aggregating 550 carats, are reported to have been found in this locality. The diamonds in Arkansas occur in a rock known as peridotite, and for this reason search for further areas of the rock has been made. This search has resulted in the finding of three new areas, the known extent of which is much smaller than that near Murfreesboro. They lie within an area of one square mile, about three miles from Murfreesboro. These localities were visited by Hugh D. Miser of the United States Geological Survey, and are described by him in Bulletin 540—U, an advance chapter from "Contributions to Economic Geology, 1912."

At the time of Mr. Miser's visit the Kimberlite Diamond Mining & Washing Co. was erecting at Kimberley a plant to wash the diamond-bearing earth to be hauled on a tramway from its peridotite area and from another tract near the mouth of Prairie Creek. Four diamonds of good quality are said to have been picked up on the surface, the largest weighing four carats. Further development work to ascertain the extent of the peridotite is now under way.

On another tract, where a little washing for diamonds has been done in a crude way without machinery, 20 diamonds have been recovered.

A copy of the report may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

CANDOR GOLD DISTRICT.

Iola Mine Has Yielded Nearly \$1,000,000 in Thirteen Years.

[Special Cor. Manufacturers Record.]
Candor, N. C., August 22.

The approaching completion of a railway from Denton to High Point is interesting as an item of internal development, but the fact that this enterprise had its origin in a North Carolina gold mine is even more interesting.

In 1900 Capt. Milton L. Jones, since deceased, became interested in a mining prospect near Candor that developed into the Iola mine, and with funds obtained from the operation of this mine he commenced construction on the railroad now nearing completion, which has already played an important part in the development of the country south of Thomasville.

Since discovery the Iola mine has been operated almost continuously to date, and has had a creditable record as far as the production is concerned. Other properties have been opened nearby. The veins are neither large nor of remarkable richness, but they are of economic value when the proper conditions of careful management and efficient plant are present. The Iola mine is 650 feet deep, and ore is being mined to supply a 45-ton mill (operating

to the mint as bars of fine bullion. During its life of near 13 years this little mine has added to the world's gold supply close to a million dollars.

Its nearest neighbor, the Uwharra mine, is fully as active. Here the main shaft is 300 feet deep, and is being sunk deeper every day, and its drifts are being driven to determine the length of the ore bodies. Extensive surface improvements are under way, consisting of a modern 50-ton mill, and a new power plant, including two 125-horse-power boilers and an eight-drill air compressor. The Uwharra has not been known as a producer, but as it is the extension of the Iola vein, there is every reason to believe that it has a good outlook. Exploration is in course at two other properties, and two are idle, one on account of litigation. The field is by no means thoroughly prospected, and though the future may develop no more mines like the Iola, it may bring to light larger bodies of low-grade ore.

With the greater economies that can be effected through available hydro-electric power and central reduction plants, with means of cheap transportation to them, this mining community should still have a number of years of profitable activity left to it.

CLAUD HAFER.



FORTY-FIVE-TON CYANIDE MILL AT CANDOR GOLD MINES.

24 hours daily). There are two shafts, one an incline on the vein 450 feet deep, and the other vertical 300 feet, where the vein is encountered and then followed 350 feet deeper at an angle of 55 degrees.

Steam is the primary motive power, and compressed air operates the drilling machinery and some of the mine pumps. The pump that drains the mine is located at the 300-foot level, and is a Cornish pump actuated by a heavy rod hung to a balanced bob at the surface kept in motion by a driving rod geared to a steam engine. This operates in the vertical shaft, and the incline is the haulage way of the mine. The ore is broken above drifts or tunnels run about 100 feet apart, and is delivered to the main shaft in cars. A self-dumping skip carries the ore out of the mine to the rock-breaker house at the shaft head, and the broken ore is discharged onto a conveying belt that is also a picking belt leading to the mill proper. Five heavy stamps, weighing close to a ton each, do the secondary crushing, and the final grinding is done by a tube mill. Solution of cyanide of potassium to dissolve the gold is added at the stamps, and the pulp issues from the tube mill as a thin mud. This is collected in steel tanks 29 feet high by 13 feet in diameter, where it is kept in continuous agitation by compressed air in order to complete the dissolution of the gold. The pulp passes through three tanks, from the last of which it is discharged at intervals into a filter press and the clean gold-bearing solution is recovered, while the barren mud or slime is sent to waste. The metallic gold is precipitated onto zinc shavings and recovered chemically, being sent

Directing to Markets.

"To help Southern producers find markets for the products of the soil" is the slogan of the market department of the Southern Railway and affiliated lines, and with this end in view two booklets have recently been issued which should prove of great value to fruit, vegetable and truck growers of the Southeastern territory. One of these booklets contains as complete a list as could be compiled of the brokers, commission merchants, jobbers and receivers of vegetables and berries located at the principal cities of the United States and Canada east of the Rocky Mountains. The booklets give the names of dealers, character of business and commodities handled in each town, together with the population of the town. A copy will be furnished free of charge to any grower of vegetables or berries along the line of the Southern Railway and affiliated lines. The second booklet contains a list of the fruit, vegetable and melon growers in the territory served by the Mobile & Ohio Railroad and the Southern Railway in Mississippi, and will be placed in the hands of dealers throughout the North and East. It is planned to issue similar booklets covering other territory throughout the Southeast.

The proceedings of the eighth annual meeting of the West Virginia Board of Trade, John J. Cornwell of Romney, president, and R. B. Naylor of Wheeling, secretary, have been published in pamphlet form, and the publication is being circulated as an advertisement of the resources of the State and its advantages for home-seekers and investors.

FOR RAISING HOME SUPPLIES.

Some Practical Common-Sense Suggestions from Florida.

Editor Manufacturers Record:

Your inquiry for our views of the needs of this part of the South is of common interest, but not easy to answer.

Sometimes we are so taken up with matters of detail that we overlook the basis of them. Our allusion to the fact that old settlers, in fact everybody in this part of the State on farms, buy the feed for their stock in more or less part, and how we manage not to buy feed for our stock, almost every day brings the inquiry, "How do you do it?"

Permit us to make a comment on this unfortunate dependence on the store. It is not because the people are not industrious. We have seen much of the world, and the people in this part of the South are in many respects above the average, and are hardworking and saving. Hardly a day passes that we do not hear them bemoaning the fact that the store eats up their hard-earned savings. There is no physical reason that this should be so, and we are going to take a chance with the amiability of the people and give for the first time, so far as we know, a view of these conditions from a new angle.

It is psychological, pure and simple. This is a statement, not a criticism. Out of it grows a lack of confidence, initiative and decision. Did you ever see a man walking down the road and note a constant hesitation in his movement because he was controlled by a fear that he might step into a hole? Some things can be raised successfully here and some things cannot. We could not raise bananas in the North, and we cannot raise wheat in this part, at least, of the South. The man with decision and initiative finds out what can be raised and forthwith proceeds to raise what he wants of it.

We asked one man why he did not raise upland rice, and he answered that he had tried it and the black birds destroyed so much of it he never tried it again. It was purely a matter of mind, for a black bird respects the scarecrow even in a field of rice. We asked another man why more families did not raise beans, and he replied that the rabbits destroyed his last crop and he never tried it again. When we showed him later a fine crop of beans in the open field he was astonished not to see even a sign of the rabbit pest. He was much pleased when we showed him how to make a simple spray and the rabbits would shun the beans. His mind lacked confidence and decision, and the rabbit sidetracked him.

Some of our neighbors say our team was looking very fine, and asked us what we fed them, and when we told them we were feeding them some of the roasting ears that the family enjoyed, they seriously warned us that our horses would have blind staggers, and one of them, out of real interest, came with a lance and offered to bleed our horses for nothing to prevent that distressing sickness. We laughingly told him we dreaded lean staggers, but had no fear of blind staggers, and then explained to him that we cut the corn up with the cob, put a very little wheat bran over it and a little salt, and occasionally gave the animals some common Epsom salts. He said it was all new to him.

The cows and pigs were also growing fat. Let us say that we saw to it that the horses worked at something every day to keep their flesh hard. We had been here less than a year and had no time to make hay. We followed this with milo maize, and which went down the line

from the horses, cows and pigs to the chickens. Instead of wasting them, all our sweet-potato vines went to the cows and pigs and some as a dessert to the horses. All the stock like them better even than cowpeas, and they are less gaseous. We came up to the time when in this part we had an abundance of the volunteer crab grass. We did not find oats a good crop here because of the tendency to rust, but German millet is very fine, and within 60 days from sowing we cut it in full head from two to three feet high. At this writing, from less than three acres, we have more milo maize, German millet, sweet-potato tops and volunteer grass than we know what to do with. You see, that with the field corn and these rotating grasses and the culled sweet potatoes everything on the place keeps in fine condition. The only item that we buy is a little shorts to give the stock, occasionally with a tonic and alternative, powdered tobacco and sulphur. To our volunteer crab grass we have added Rhodes grass for a hay to be fed green and cured and stored to be used as needed any time of the year. We shall add upland rice to go with the corn in the place of oats, which when properly handled makes a fine grain as well as hay, and any surplus finds a ready market. This is the way we are doing the thing and with great satisfaction. We never found it so easy in the North to rotate and provide abundant feed supplies for the entire year.

Coming back to our psychological theory, our remedy lies in such a reorganization of things so as to lead the people to mix. "Steel sharpeneth steel." Men 70 years old have never seen a threshing machine. To talk to these people about things they have never seen is talking in riddles. Get in interurban transportation and mix the people of all types in the melting pot of new industries, and we have done more for the South than all the preachings of a century. This is our solution. E. PROUTY.

Arcadia, Fla.

Georgia Chamber of Commerce.

As the result of a movement inaugurated by the Atlanta Chamber of Commerce, under the leadership of Chas. J. Haden, a meeting was held in Atlanta a few weeks ago, at which were present representatives out of about 30 towns and cities of the State for the purpose of considering the organization of the Georgia Chamber of Commerce.

After an earnest and prolonged discussion these representatives unanimously resolved that this organization should be undertaken at once. An executive committee composed of C. J. Haden of Atlanta, chairman, and Messrs. P. M. Atkinson of Madison, R. D. Cole of Newnan, J. S. Davis of Albany, G. W. Deen of Waycross, J. A. McCord of Atlanta, W. H. Shippen of Ellijay and C. A. Wickersham of College Park were appointed and given full authority to perfect the details of this organization and to call another meeting for a permanent organization at Macon. This executive committee had a meeting in Atlanta a few days ago to discuss the details of the organization, and called a meeting for a permanent organization at Macon on September 16.

Charles D. McKinney, formerly president of the Decatur Board of Trade, which organization has met with phenomenal success in the development of De Kalb county, was requested to act temporarily as secretary of the preliminary work of preparing for the Macon meeting.

Messrs. Haden and McKinney were authorized by the meeting to proceed with the organization along the lines approved. A list of 80 local organizations through-

out the State has been secured and an earnest effort will be made to organize other organizations between now and September 16. Correspondence with organizations in other parts of the Union has developed the fact that there are already organized more than 30 such State organizations.

The purpose of the organization will be to organize local organizations in every county of the State where there is not already a local commercial organization, and to aid those already organized; to bring these various organizations into active co-operation with each other and with all other similar organizations of the State, and with the various officials of the counties, towns and cities, and of the State and the United States, in such work as that of road building, better educational facilities and better sanitary conditions.

The Georgia Chamber of Commerce will also study the condition of the State thoroughly and report the results of same to the people of Georgia. It will make a special effort to bring the farmers and business men closer together. Extensive advertising of the resources of the State is a very important part of the program. Through the publicity committee an effort will be made especially through the State press to keep the people of Georgia thoroughly informed as to the agricultural, industrial and sanitary conditions of the State, and all movements for the betterment of these conditions will be fostered and encouraged.

The Birmingham Iron Market.

[Special Cor. Manufacturers Record.]

Birmingham, Ala., August 23.

The pig-iron market was not so active in the week ending today as in the week just previous, but the tonnage entered is more than equal to the production, and the fact that comparatively small melters only were represented in the trading is very significant.

As to prices, it is quite certain that no tonnage has been sold since last report for shipment into non-competitive territory at a lower figure than a basis of \$11 per ton at Birmingham for No. 2 foundry. Reports from the West have accredited the producer of a certain brand with the disposition to shade an \$11 Birmingham schedule in order to effect quick movement of the grades actually on yards and in excess of order-book requirements, but such rumors cannot be confirmed, and the trading of the week was not of such a nature as to indicate shading in any quarter. In fact, with the comparatively low rate of production, the shortage of railway equipment and unsatisfactory labor conditions, it does not seem likely that any producer would be disposed to force the situation, and as the demand has gradually improved in the past month through an increased consumption in all of the foundry lines, the shading of prices in any territory just at this time would be forcing a market where unnecessary. As has been stated previously, the majority of the producers have sufficient orders in hand to take care of the production through the next 60 to 90 days, and stocks have been reduced to such an extent that no individual holding is considered cumbersome, notwithstanding the bulk of the aggregate. The consuming interests have followed a very conservative course for some months, and while in certain lines the contract provision was liberal, actual receipts have been quite on the hand-to-mouth order. All such conditions make for the stability of the market, and as July and August have been practically gone through without any material change in the rate of consumption, nor without affecting general trade conditions, a

gradual improvement toward the remainder of the year is quite naturally expected. With the expected improvement the probable price for first quarter and first half requirements comes up for consideration, and so far the producers are either unwilling or unable to commit themselves. As is usually the case, more or less tonnage has been submitted for the advanced requirement in the shape of additions to that required on earlier dates, but so far as is known, no provision has been made in any recent contracts for the carrying over into next year of tonnage not delivered prior to January 1. First quarter and first half deliveries have not been offered, and are not quotable at this time.

In the main, the sales of the week were made by one concern. More or less tonnage was offered from all operations for delivery in the last quarter, but the trade did not take hold extensively, and single lots of 1000 tons each were the largest recorded. With the end of the month only a week off, such conditions were not unusual, and for the same reason the heavy sale of curleands and 100-ton lots in the week was not out of the ordinary. Except where special chemical content was stipulated, the tonnage sold brought \$11 at Birmingham for Nos. 2 foundry and 2 soft, with \$10.25 per ton at Birmingham for No. 4 foundry and gray forge. Such No. 3 foundry as is in demand is quotable at \$10.50 per ton at Birmingham, but in this the local furnace conditions would govern entirely. Furnace operations on September 1 will be the same as on August 1, without a change probable for two months to follow. The matter of supplying ore for the several operations continues to feature, and has resulted in negotiations for additional equipment at the red ore properties of two of the leading concerns. It is interesting to note that the several brown-ore deposits have been worked to such an extent in the past two years that certain authorities have been able to make accurate estimates of the remaining tonnage at the majority of present operations. The furnace coke supply is considered easier than at any time for many years, due to the installation of by-product ovens, and, of course, to the larger output from coal mines. Both coke and ore are being accumulated at the idle plants when practicable, and it is quite likely that all necessary repairs to the idle stacks will be completed as early as is practicable; but other than in a general way, it is not believed that the blowing in of any additional furnaces is being considered. For delivery in the remainder of the year the market for all of the several grades is quoted as below per gross ton f. o. b. cars at Birmingham furnaces, viz.:

No. 1 foundry, \$11.50.

No. 2 foundry, \$11.

No. 3 foundry, \$10.50.

No. 4 foundry, \$10.

Gray forge, \$10.

Mottled, \$9.75.

Standard basic, \$11.

Off basic, \$10.50.

Standard warm-blast charcoal iron, \$25.

No recent sale of basic, either in standard or off grades, is reported, but the market is no doubt firm at \$11 per ton Birmingham. The demand for charcoal iron is limited to scattering lots of 50 to 150 tons each, and for such business the figures quoted above are being maintained.

The producers of cast iron water and gas pipe have succeeded in maintaining prices at Birmingham, notwithstanding the small volume of business offered and the sharp competition from Eastern plants. Practically all equipment, especially for the larger sizes, is kept in operation, and the product is being stored against a demand that is reasonably ex-

pected to develop with a more satisfactory market for municipal securities. The recent reduction in the make of cast iron soil pipe has been partially offset by an increase to full capacity at a local plant where operations have been reduced for some months; but prices continue to decline, and until the movement for the requirement in next spring is well under way there is little hope for an improvement. The erection of an additional soil pipe producing plant at Anniston, Ala., is actually under way, and reports from that point indicate an additional plant under consideration for early erection. To the water pipe manufacturers the letting in the week consists of small quantities, with price considerations about in line with those quoted. We quote as follows per net ton f. o. b. cars at Birmingham, viz.: Four-inch, \$22; six-inch and eight-inch, 20.50, with an average of \$20 per ton for the larger sizes. Class "A," or gas pipe, is quoted at an advance of \$1 per ton over that asked for class "B."

Further improvement in sentiment is noted in the market for the several grades of old material, but actual trade conditions have changed but little since last report. The majority of the consuming interests are apparently unwilling to contract at ruling figures, and buying on the hand-to-mouth order continues the rule. Owing to the pronounced scarcity of low-grade pig-iron, heavy cast scrap has been in more ready demand, but steel grades are dragging on the market, with practically no interest shown in country and wrought grades.

The steam coal market is very quiet, and does not promise to improve within the next 30 to 60 days. In this the present rate of furnace activity is most effective, although the railroad requirement has hardly been up to expectations. The requirement for the several oil industries incident to the cotton crop is hardly in definite form so far, but as a whole the entire consumption is considerably smaller than was provided for in the plans for operating, and as a result operators on favorite seams are finding it necessary to either curtail the output or sell the product at figures very close to mining cost.

The coke market is practically as last reported, with probably a larger tonnage being required by the foundry trade.

In finished lines the absence of new business is very pronounced. Deliveries are easier from all mills, and the unfilled tonnage to be carried over in September will be comparatively small. It is not understood that prices have suffered further decline, but all producers are more aggressive for business.

Pittsburgh Capital at Roanoke.

The Roanoke Refined Iron Co., Roanoke, Va., has been incorporated with a maximum capital stock of \$500,000 and the following officers: Delano C. Thomas, president; W. C. Hughes, vice-president; L. S. H. Gable, secretary-treasurer. Outlining the company's plans, Mr. Gable wires the MANUFACTURERS RECORD as follows:

"Roanoke Refined Iron Co. has purchased and will operate the Roanoke Rolling Mills, and with the use of a new alloy and the help of a complete Pittsburgh executive and skilled labor organization expect to be producing 200 tons of new high tensile iron per day, operations to commence in the near future."

With returns from a few counties still to be made, the assessed value of property in Georgia this year shows an increase of \$18,703,063 over last year. Of the total increase \$10,823,000 is in Fulton county alone.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Alexandria, La.—City voted \$14,000 bonds for street paving and drainage.

Anahuac, Tex.—Road District No. 4 of Chambers county issued \$100,000 bonds for road construction.

Angleton, Tex.—Brazoria county, District No. 2, voted \$150,000 to construct roads.

Cartersville, Ga.—City voted \$15,000 bonds to improve streets.

Georgetown, Tex.—District No. 2 of Williamson county voted \$50,000 bonds for road construction.

Maryville, Mo.—Polk township of Nodaway county voted \$50,000 bonds for road construction.

Orlando, Fla.—City voted \$100,000 bonds for street paving.

Waynesboro, Miss.—Wayne County Supervisors ordered \$100,000 bond issue for road construction.

Woodsboro, Tex.—Precinct No. 2 of Refugio county voted \$25,000 bonds for road construction.

Bonds to Be Voted.

Angleton, Tex.—Brazoria county votes August 28 on \$75,000 bonds for road construction.

Austell, Ga.—City votes August 27 on \$5000 bonds for street improvements.

Groveton, Tex.—Precinct No. 2 of Trinity county votes September 16 on \$100,000 bonds for road construction.

Moultrie, Ga.—Colquitt county will vote on \$400,000 bonds to build roads.

Rockford, Ala.—Coosa county votes October 6 on \$75,000 bonds to build and improve roads.

St. Petersburg, Fla.—City votes October 7 on \$20,500 bonds for paving.

Contracts Awarded.

Baltimore, Md.—City awarded contract for granite block paving to cost \$51,000.

Collins, Miss.—Supervisors' District let contract to gravel 37 miles of roads.

Denison, Tex.—City let \$50,000 contract for paving 14 blocks.

Fayetteville, Ark.—City let contract for paving public square and streets to cost \$45,000.

Gadsden, Ala.—City awarded contract for bituminous concrete paving to cost \$40,000.

Havre de Grace, Md.—City let \$4600 contract for resurfacing streets.

Marshall, Mo.—City awarded contract for 13,000 square yards of dollarway pavement.

McMechen, W. Va.—McCullagh & Reid awarded contract for 40,000 to 50,000 square feet of cement sidewalks and 8000 linear feet of concrete curbing.

Texarkana, Ark.—Miller county let contract for grading and surfacing 12 miles of roads.

Contracts to Be Awarded.

Baltimore, Md.—City invites bids until September 3 for 13,550 square yards of sheet asphalt, 2330 square yards of vitrified block and 3050 square yards of granite block paving.

Birmingham, Ala.—Jefferson county will build macadam road eight miles long.

Charlotte, N. C.—City will invite bids for sheet asphalt and concrete pavement to cost \$60,000.

Denton, Md.—Caroline county will expend \$35,000 for road construction.

Greenville, Ky.—City opens bids about September 1 to grade and rebuild two miles of macadam streets.

Jacksonville, Fla.—City has \$29,000 available for additional street paving.

Louisville, Ky.—City receives bids until September 4 for wood block paving to cost \$21,000.

Richmond, Va.—City has \$4000 for granite spall paving.

Shreveport, La.—City receives bids until September 8 for about 2500 square yards of alley paving.

Alabama Highways and Bridges.

According to a report by the State Highway Engineer of Alabama, nearly \$250,000 was expended in that State during the year ended March 1 under his department's supervision. The exact amount was \$236,302.02, of which \$217,971.90 was for roads and \$18,330.72 for bridges. The amount appropriated by the State for roads and bridges during the year was \$120,000. Fifty-six counties applied for aid on roads and bridges during 1912, and 46 counties used State aid during that year. The number of applications for State aid for 1913 to March 1 was 31. The total mileage of road constructed under the supervision of the department for the year ended March 1 was 97.56, while the number of miles contracted for and unfinished was 49.72. The amount invested for roads in 1912, including State and county, was \$1,353,750. The amount available for roads this year is \$1,534,424, and for bridges \$333,176. The total mileage of roads in Alabama is 49,639.

\$1,750,000 for Tampa Paving.

On August 20, 1912, the city of Tampa, Fla., was bonded for \$1,750,000 for municipal improvements. Since that date the greater portion of the amount has been expended, the improvements including mainly new paving for the streets of the municipality. This paving now aggregates about 20 miles of improved highways, some 310 city blocks, averaging 300 feet in length. It is largely vitrified brick construction, the minor quantity being of asphalt. In addition to this, the Board of Public Works has built about two miles of macadam streets in its districts, using the rock from the streets relaid with brick.

Another Anniston Pipe Foundry.

Anniston's already large production of piping will soon be augmented by another plant, which is to be built by the Standard Foundry Co. This company will incorporate with a capital stock of \$100,000, and its officers will probably include Sam F. Morris, president, and Frank Carrington, assistant manager. It plans an annual capacity of 10,000 tons of soil pipe and fittings, employing at first from 125 to 150 men. The plant may be briefly described as follows: Main foundry building, 250 feet long by 100 feet wide; pattern shop; machine shop; administration building; all with concrete foundations and wood superstructures. Electricity will be used for motive power, including individual motors.

Motor Cars for Street Railways.

Two steel cars propelled by gasoline motors, manufactured by the Carlson Motor Truck Co. of Philadelphia, are in operation on a street-car line at Hendersonville, N. C., as an experiment to test the theory that the gasoline motor is economical for street railway and interurban service. The Hendersonville street-car system is two miles long and the cars are 30 feet long and make about an average of eight miles on each gallon of gasoline used.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

BIG MERGER UNDER WAY.

United Gas and Electric Corporation to Take Over Southern Utilities.

Plans are well advanced for the United Gas and Electric Corporation, 40 Wall street, New York, to acquire control of the American Cities Corporation, which controls half a dozen important public service companies in the South, viz., New Orleans Railway & Light Co., Birmingham Railway, Light & Power Co., Memphis Street Railway Co., Little Rock Railway & Electric Co., Knoxville Railway & Light Co. and Houston Lighting & Power Co., the total capital stock of which six enterprises amounts to about \$32,000,000 common and \$16,750,000 preferred outstanding, besides about \$62,000,000 of bonds.

A circular addressed to the stockholders of the United Gas and Electric Corporation and dated August 26 has been issued by President George Bullock, stating that he has obtained reasonable assurance that the Corporation can acquire a majority of the common stock of the American Cities Company on the terms mentioned in resolutions adopted unanimously by the directors of the United Gas and Electric Corporation July 10 and which are thus: The Corporation to issue \$12,500,000 of its second preferred stock to bear cumulative dividends beginning at 2 per cent. for 1914 and rising at the rate of 1 per cent. each year up to 6 per cent. in 1918, and then continuing at the last-named rate, this stock to be preferred as to assets in the event of liquidation. Further, that this new stock and common stock of the Corporation is to be used to pay for the common stock of the American Cities Company at the rate of \$75 par of preferred and \$25 par of the common for each share of the common stock of the American Cities Company of \$100 par. The purchase is recommended to the stockholders of the Corporation, who are called by President Bullock to meet September 24 at Hartford, Conn., where its principal office is situated in 11 Central Row, to authorize the issue of second preferred stock to the amount of 125,000 shares of \$100 par and approve the plan for the purchase.

President Bullock further says that the equity behind the preferred stock will be increased, and that the common stock will likewise be benefited; also that the officers of the Corporation are convinced that through resulting earnings and economies in the purchasing and operating departments of both companies there will be a decided increase in the net profits applicable to the common stock of the Corporation. Two-thirds of each class of stock will have to approve the proposed issue.

The Southern companies which will pass under the control of the United Gas and Electric Corporation when the deal is fulfilled had last year (the 12 months ended March 31, 1913) gross earnings of more than \$14,000,000, distributed thus: New Orleans Railway & Light Co., \$6,690,861.47; Birmingham Railway, Light & Power Co., \$3,071,152.76; Memphis Street Railway Co., \$1,972,386.35; Little Rock Railway & Electric Co., \$992,005.09; Knoxville Railway & Light Co., \$748,209.57; Houston Lighting & Power Co., \$698,785.11. It may be mentioned that the United Gas and Electric Corporation already controls a Southern property (the Houston Gas & Fuel Co.) the

gross earnings of which this year were \$395,287.11. The merger will combine properties having total annual gross earnings of over \$27,000,000, more than half of which amount is in the South.

Both the United Gas and Electric Corporation and the American Cities Company are represented by Bertron, Griscom & Co. of 40 Wall street. George Bullock is president of the former, and he is also vice-president of the latter. George H. Davis is president of the American Cities Company. S. R. Bertron is a director in both companies. The firm is composed of S. Reading Bertron, Rodman E. Griscom, Francis T. Homer (formerly of Baltimore), Marshall J. Dodge, Murray W. Dodge and William Lord Sexton.

Through this deal, when effected, the United Gas and Electric Corporation will control public service interests in six of the most prosperous and rapidly growing cities of the South, destined to be among the great centers of commercial and industrial activity of that section. New Orleans, as the outlet for the almost limitless potentialities of the territory drained by the Mississippi Valley, stretching from the Alleghany to the Rocky Mountains and from Canada to the Gulf, is certain to be one of the great commercial centers of the world. Birmingham, the predestined center of vast metallurgical activities, has only begun to grow. Its future development will be far more rapid than that of the past. Memphis has of recent years become one of the most prosperous cities of the South, showing on every hand evidences of vast business interests, of an enormous expansion in freight traffic and great increase in wealth. Knoxville is in the center of one of the richest mineral and timber regions of this or any other land. Its future growth should be very much more rapid than has yet been seen, and all indications point to that city becoming one of the most progressive places of the South. Houston is one of the marvels of American city growth. Few other places in America can equal it in the rapidity of its development, and few others have a more certain future not only as a great commercial and industrial center, but as one of the great financial centers of the Southwest.

The movement of the United Gas and Electric Corporation in its plans to secure intimate identification with these growing centers of the South is indicative of the trend of American investment capital into this section.

IMPORTANT FLORIDA LINE.

Tampa & Gulf Coast Railroad Pushing Extension to Rich Section of the State.

President C. H. Brown of the Tampa & Gulf Coast Railroad, says that there are about 500 laborers now at work on the construction of its new line, which will be about 47 miles long to Clearwater, Belleaire, Largo, Indian Rocks and thence through the Seminole section to St. Petersburg, Fla. About 15 miles of grading have been completed and about 75,000 cross-ties are cut. It is expected to begin tracklaying by September 1, and it is hoped to have the line completed and trains operating in less than a year.

The route of the extension is through one of the finest orange and other fruit sections of Florida, and will open up much new territory to be developed into vegetable and market gardening country. The western coast of Pinellas county, which will thus be reached, is most fertile and beautiful, and it is growing by leaps and bounds. There is a great deal of tonnage along the route, including lumber, wood for other uses, naval stores, rock for

road construction, quantities of fish and oysters, besides large amounts of citrus fruits, fertilizers and merchandise. The road will provide this west coast region with a direct route to deep water at Tampa, a splendid outlet for its products, and besides a seaport terminal for the entire Tampa & Gulf Coast Railroad. It is estimated that the new line will be very successful.

A letter from D. F. Conoley of Tampa says that the line will use the Tampa Northern tracks out of Tampa to a point just north of Sulphur Springs, where the extension begins, the route being due west to the head of Old Tampa Bay. It should be in operation as far as Clearwater, which is on the Gulf of Mexico coast, or what is known as Clearwater harbor, by February 1 next. From the head of the Old Tampa Bay the route is generally southwest to Clearwater, much of it near the bay shore, and thence south for several miles and finally southeast across the peninsula to St. Petersburg.

The railroad company is already operating a line from Lutz Junction, which is on the Tampa Northern some miles north of Sulphur Springs, west to Odessa and Tarpon Springs. A line south from Odessa will connect this with the new extension. Then the present line between Lutz Junction and Odessa will be abandoned and taken up. Two trains are being operated daily to Tarpon Springs. At this latter point nearly \$200,000 is being expended for improvements, including a new hotel, paving, additional water-works and sewer. This region is developing rapidly.

BIRMINGHAM-TUSCALOOSA.

Report Describing Plans for Electric Railway to Connect the Two Cities.

A report by George I. Brown of Birmingham, Ala., on the Birmingham-Tuscaloosa Railway & Utilities Co., which was chartered last winter, says that at considerable expense for engineering the company has succeeded in locating a low-grade route between Tuscaloosa and Bessemer, the maximum grade being seven-tenths of 1 per cent. and the maximum curvature $4\frac{1}{2}$ degrees, while 70 per cent. of the line will be tangent. The distance between the two points is about 47 miles. It will connect with the Tuscaloosa Belt Line, which is owned by the company. At Bessemer it will connect with the Birmingham, Ensley & Bessemer Railway, which is owned by the same interests. Through the latter connection will be made with all the steam railroads in the Birmingham district.

The line will traverse a region of fully developed mineral resources, including coal, brown iron ore and chert. At Tuscaloosa navigable water will be reached with barge line from there to New Orleans, for which self-propelled steel barges are now being built. It is asserted that the proposed road will be able to handle freight at remarkably low rates. The total cost of its construction, including car equipment, etc., will, it is said, not exceed \$3,500,000, and it is figured that operation will be 60 per cent. of gross earnings.

The company is to manufacture and sell electricity in Tuscaloosa, as well as in the territory adjacent to its line from there to Bessemer, and it will also sell electricity to the Birmingham, Ensley & Bessemer Railway for either operation or distribution in Birmingham. There will also be operated a gas distribution system in Tuscaloosa. Allied interests propose to install a by-product coke-making plant. Necessary franchises are held.

Mr. Brown, who has made the report,

is a civil engineer, and he is also general manager of the Birmingham, Ensley & Bessemer Railway, which is already operating its line from East Lake through Birmingham to Ensley, and is now completing an extension to Bessemer.

Officers of the Birmingham-Tuscaloosa Railway & Utilities Co. are F. E. Calkins of New York, president; R. Mitchell Brown of Norfolk, vice-president; Henry Cross of Philadelphia, treasurer. Morris Bros., bankers, 1421 Chestnut street, Philadelphia, and 141 Broadway, New York, are interested.

MRS. C. B. WILLIAMS, PRESIDENT.

An Atlanta Lady Elected Chief Executive of a Georgia Railroad Company.

A report from Bainbridge, Ga., announces the election of Mrs. Cora B. Williams as president of the Georgia, Florida & Alabama Railway to succeed her husband, the late J. P. Williams. The road is 194 miles long from Richland, Ga., to Tallahassee, Fla., Quincy, Fla., the latter being on a branch, and it has 19 locomotives and 242 cars. It connects at Richland with the Seaboard Air Line and at Cuthbert, Ga., with the Central of Georgia Railway. The extension from Cuthbert to Richland was recently finished.

Concerning the election of Mrs. Williams to the presidency of the railroad another report from Atlanta, where Mr. and Mrs. Williams resided, says that she has inherited absolutely her husband's estate, as he left no children, and it includes 90 per cent. of the railroad stock, all of its bonds, a steamboat line operating from Carrabelle to Apalachicola, Fla., and about 250,000 acres of land in Georgia and Florida. The whole estate is valued at from \$5,000,000 to \$10,000,000. It is further said that for several years Mrs. Williams had been trained by her husband to look after and take charge of his business affairs, and that in the later years of his life she was virtually manager for him, he being then an invalid. It is expected that she will continue to direct the management of the properties as heretofore.

AMERICAN LOCOMOTIVE CO.

Gross Earnings in 1913 the Greatest of Any Year—Other Gratifying Figures.

The annual report of the American Locomotive Co., covering the fiscal year ended June 30, 1913, has been issued in pamphlet form, and it reveals the extraordinary success of the corporation during the twelvemonth. President W. H. Marshall says:

"The gross earnings for the year, \$54,868,174.88, were the largest of any year in the history of the company. They were about \$5,350,000 more than in the year 1906-1907, which was the largest previous year, and were over twice as great as in 1901-1902, the first year of our business. They include the proceeds from the sale of steam and electric locomotives, automobiles and motor trucks, general repairs, spare parts and sundry miscellaneous revenue.

"The surplus available for dividends after a charge for depreciation of \$1,226,534.78 was \$6,185,305.27, which has been exceeded only in the year ended June 30, 1907. After the payment of the preferred dividend of \$1,750,000 there was created out of the remaining surplus of \$4,435,305.27 a reserve fund of \$600,000 to provide for current additions and betterments to the plants.

"The amount of unfilled locomotive orders on the books on July 1, 1913, was \$17,156,388, as compared with \$14,450,000 at the beginning of the fiscal year.

The volume of new orders taken during the year was well sustained up to June, when there was a marked falling off, and there is now every indication of a reduction in the operations of the plants in the United States in the near future."

The report also announces the recent decision of the company to discontinue the manufacture of automobiles and motor trucks, saying that this department was unprofitable. A reserve of \$2,300,000 has been created to meet any losses which may occur in liquidating this business.

The condensed income account presented shows gross earnings \$54,868,174.88, increase as compared with the last year \$24,418,723.25; net earnings after allowing for manufacturing, maintenance and administrative expenses and depreciation \$6,826,483.63, increase \$4,494,479.15; profit after deduction of interest, etc., on bonds of constituent companies, coupon notes, etc., \$6,185,305.27, increase \$4,317,751.06; surplus after preferred dividends \$4,435,305.27, increase \$4,317,751.06; net credit to profit and loss after reserve deducted for additions and betterments \$3,835,305.27, increase \$3,717,751.06.

The general balance-sheet shows total assets of \$81,246,136.58, which includes the cost of property at \$52,623,219.76, the convertible assets being given as \$26,900,026.50.

DIRECT TO LAKE OKEECHOBEE.

Interurban Railway to Begin Construction Soon for Important Connections.

Col. E. Prouty, Arcadia, Fla., says concerning the proposed interurban railway from there to Lake Okeechobee:

"This line will be the link connecting the east and west coasts via the steam roads on the west and the lake and canals on the east. At the present time to get from one coast to the other is like going to the elbow and back to get on the other side of the forefinger. It is a great drawback to South Florida.

"As nearly as we can ascertain, about 25,000 people visit Lake Okeechobee under present conditions each year. With better boats and pleasant overland trains, with wide advertising and a system of through tickets at least 50 per cent. of the tourists and resorters in Southern Florida would pass over this route.

"In addition to the ample hotels it is proposed to have at the lake terminal, a pavilion with waiting-room for the women and children, well chaperoned and at certain seasons of the year music and light entertainments to attract and entertain excursionists. With this business the trains could run without stops from the lake to Arcadia and make money. It stands as a financial guarantee to the enterprise.

"However, the first object of the project is to develop the agricultural districts. From Arcadia to the lake is about 50 miles of practically level land, very sparsely settled. Enough of this is available for farming and groves to make it attractive and ultimately progressive and wealthy. A great deal of it has been sold out in small tracts to prospective settlers, while perhaps not 5 per cent. of it is occupied. From 20 to 50 miles from transportation is a condition appalling to the man and woman coming from States and cities of push and progress. The men and women with the brains and energies to create and master industries to make a country prosperous will not stand for it.

"Our personal connection with the project grows out of a long-cherished wish to develop the latent interests of the South. Its wonderful resources are not appreciated by the people, who treat them

superficially. Metals are mixed to make them useful. The initiative of the North and the staidness of the South make fine material to convert this country into the greatest industrial workshop of the nation. This cannot be realized without facilities equal to the opportunity. One man told us only yesterday that he had sold to 200 families, who would locate at once when our line was in operation. Another landowner said he had 1500 buyers in good standing, and who were only waiting for transportation. Another man wrote that he had nearly 1200 buyers, and every one of them would take stock in a traffic system such as we proposed and would become residents of Florida. And we could name many more. A body with arteries and no veins is a poor outfit, but to have neither arteries nor veins is worse. The steam roads, so far as they go, are arteries, and the interurban lines are the veins.

"It is our intention to make a living rate to these people, and a commutation family ticket of one cent a mile. We will have signal stops every half mile, and sidings to meet the requirements of the farmers and growers. We will carry a free baggage and parcel compartment to accommodate the people going to and from the trading points.

"As things look now we will be at work laying the tracks within the next 90 days."

Larger Pier and Dock Facilities.

The Baltimore & Ohio Railroad has decided to enlarge facilities at Locust Point, Baltimore, by the construction of about 56,000 feet of additional pier space. This is the tidewater terminal of the road, where the export and import business has been increasing steadily. It will give the piers at Locust Point about 800,000 square feet of space. Pier No. 5 will be extended to a total length of 800 feet and 69 feet wide. Bids for the work will be opened almost immediately, and it is expected that the contract will be let next week. More docking space will be given to steamships, so that they may be accommodated on both sides of the pier.

New Equipment, Etc.

Lee Paul, 112 N. 9th street, Richmond, Va., contemplates promoting plans for an interurban railway, and wishes to investigate gasoline motor cars.

Roanoke Railroad & Lumber Co. has ordered a mogul locomotive from the Baldwin Works, Philadelphia.

Florida & East Coast Railway, says a market report, has ordered 1000 tons of rails from the Pennsylvania Steel Co.

Pennsylvania Railroad is reported contemplating purchase of 150,000 tons of rails.

Baltimore & Ohio Earnings.

The Baltimore & Ohio Railroad Co.'s statement of earnings and expenses for July (exclusive of outside operations) shows: Operating revenue \$8,838,810, increase as compared with July, 1912, \$785,925; total operating expenses \$6,146,001, increase \$485,527; net operating revenue \$2,692,809, increase \$300,398. Outside operations, it is estimated, will show a deficit of \$75,413.52 for July, as compared with a deficit in July, 1912, of \$102,193.03.

The latest bulletin of the address by T. H. Gatlin of the engineering department of the Southern Railway on the graduate engineer and his status in the higher economics of railroad construction and operation in the South, delivered before the engineering classes of the University of South Carolina, has, through the generosity of the Southern Railway Co., been published as a bulletin of the university.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER IN 1912.

The Output for the Country Reported by Separate States.

A preliminary statement of the output of lumber, laths and shingles in the United States during the calendar years 1912, 1911 and 1910 was issued this week by Director of the Census William J. Harris. It was prepared under the direction of William M. Steuart, chief statistician for manufactures, by Jasper E. Wheelchel. The data were collected, as for several years past, in co-operation with the forest service of the Department of Agriculture. The publication of the statistics for 1912 over four months earlier than for the preceding year gives them additional interest and value.

The number of active mills contributing to the totals were 29,648 in 1912, 28,107 in 1911 and 31,934 in 1910, while the reported production in these years was, in M feet board measure, 39,158,414, 37,003,207 and 40,018,282, respectively. The statistics were collected almost entirely through correspondence by the Bureau of the Census, and cover the output of practically every commercial mill in operation during the whole or any part of this period. Annual returns from small neighborhood mills and others showing a total cut of less than 50 M feet board measure have not been included.

On the whole, the showing for the past year indicates improved conditions in the lumber industry. Although the total reported cut was slightly less than in 1910, the average yield per mill was 5.3 per cent. greater than in that year, while the total production over 1911 was 2,155,207 M feet board measure, or nearly 6 per cent. In view of the fact that it was a Presidential election year, the degree of activity in the lumber industry during 1912 as reflected by the figures is especially noteworthy, the output exceeding that of four years earlier—1908—by nearly 6,000,000,000 feet board measure, or 17.9 per cent.

Increases among the individual States were quite general, slight exceptions appearing in certain of the Eastern States and a few of the Western mountain States, with, of course, the usual decrease in the output of the Lake States, which has characterized the showing for several years, due directly to the rapidly decreasing supply of lumber material in this region. While both the principal lumber-producing centers, namely, the Southern States and the Pacific Coast States, reported larger cuts in 1912 than in the preceding year, the increased production in the first-named group was substantially greater than for the United States as a whole.

The production reported from Washington in 1912 was the largest recorded since 1906. Although for nearly a decade this State has led all others in the production of lumber and shingles, in 1912 it contributed more than one-tenth of all the lumber and nearly two-thirds of the shingles manufactured in the United States.

Of the reported total lumber production, softwoods contributed 30,526,416 M feet board measure in 1912, as against 28,902,388 M feet in 1911, and 31,160,856 M feet in 1910. More than nine-tenths of the present stand of yellow pine—the softwood which is drawn upon most heavily for lumber material—is in the yellow-

pine belt, which comprises the Atlantic and Gulf Coast States from Virginia to Texas, inclusive, together with Missouri, Arkansas and Oklahoma. Under the term yellow pine are included the several species—longleaf, shortleaf, loblolly, Cuban, etc. The reported cut from yellow-pine timber in this territory during the year amounted to 14,470,617 M feet board measure, or about 98 per cent. of the total output from this species in the United States. Douglas fir, the species which ranked next to yellow pine among the conifers or softwoods, supplied material for 5,175,123 M feet board measure. The production from both of these species was greater in 1912 than in the preceding year. White pine ranked third among the softwoods in 1912, though the cut from this wood was smaller than in the preceding year, and has been declining steadily for several years past.

The reported cut of hardwood lumber in 1912 was 8,631,998 M feet board measure, as against 8,100,819 M feet in 1911, and 8,857,426 M feet in 1910. To this total oak, the leading hardwood species, contributed 3,318,952 M feet, or 38.4 per cent., and showed an increase over the output for the preceding year of 220,508 M feet, or 7.1 per cent. Maple, red gum, tulip poplar, chestnut, beech and birch followed oak in the order named.

The production of lath and shingles in 1912 did not differ materially from the output of these products during the preceding calendar year, although each was reported in slightly smaller quantities than in 1910.

The comparative summary follows:

Lumber Production (M Feet Board Measure).			
State.	1912.	1911.	1910.
United States.....	39,158,414	37,003,207	40,018,282
Washington	4,069,775	4,064,754	4,067,492
Louisiana	3,876,211	3,566,456	3,733,900
Mississippi	2,381,898	2,041,615	2,122,205
North Carolina.....	2,193,308	1,798,724	1,824,722
Oregon	1,916,160	1,803,628	2,084,633
Texas	1,902,201	1,681,080	1,884,134
Arkansas	1,821,811	1,777,503	1,844,446
Virginia	1,569,997	1,359,790	1,652,192
Wisconsin	1,498,876	1,761,986	1,891,291
Michigan	1,488,827	1,466,754	1,681,081
Minnesota	1,436,726	1,485,015	1,457,734
Alabama	1,378,151	1,226,212	1,465,623
West Virginia.....	1,318,732	1,387,786	1,376,737
California	1,203,059	1,207,561	1,254,826
Florida	1,067,525	983,824	992,091
Pennsylvania	992,180	1,048,606	1,241,199
Georgia	941,291	801,611	1,041,617
Tennessee	832,572	914,579	1,016,475
Maine	882,128	828,417	860,273
South Carolina.....	816,930	854,872	706,831
Idaho	713,575	765,670	745,984
Kentucky	641,296	632,415	753,556
New York	502,351	526,283	506,074
Ohio	499,834	427,161	490,039
New Hampshire.....	479,499	388,619	443,907
Missouri	422,470	418,586	501,691
Indiana	401,017	360,613	422,963
Montana	372,174	228,416	379,089
Massachusetts.....	259,329	273,317	239,206
Vermont	235,983	239,254	284,815
Maryland	174,320	144,078	154,554
Oklahoma	168,806	143,869	164,663
Illinois	122,528	96,651	113,506
Connecticut	109,251	124,661	126,463
Colorado	88,451	95,908	121,398
New Mexico.....	82,650	83,728	83,544
Arizona	76,287	73,129	72,055
Iowa	46,583	59,974	75,446
New Jersey.....	34,810	28,639	36,542
Delaware	28,285	23,853	46,642
South Dakota.....	20,986	13,046	16,340
Rhode Island.....	14,421	9,016	14,392
Wyoming	13,560	33,309	30,931
Utah	9,055	10,573	11,786
All other.....	22,525	11,786	12,594

Laths (thousands) 2,719,163 2,971,110 3,494,718
Shingles (thousands) 12,037,685 12,113,867 12,976,362

*Includes Kansas, Nebraska and Nevada.

2,000,000 Crates Monthly.

The Suffolk Truck Package Co., Suffolk, Va., will soon complete its plant, replacing that recently damaged by fire. It will have a monthly capacity of more than 2,000,000 crates, and the plant may be briefly outlined as follows: Total floor space, 15,532 square feet; two-story main building; large engine-room and sawdust house; crating room; steaming room; heavy machinery house; all fireproof, having cement and sheet-iron roofs; two 150-horse-power boilers, three engines of 90, 75 and 30 horse-power, respectively; three veneer lathes, four veneer clippers, rip saws and cut-off saws.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Proximity Print Works.

The Proximity Manufacturing Co., Greensboro, N. C., writes to the MANUFACTURERS RECORD as follows:

"We have the buildings for our new print works about completed, and are installing the machinery, all purchased from H. W. Butterworth & Sons Company of Philadelphia. The main building is 250 feet long by 50 feet wide, two stories high. The dyehouse is 50 feet wide by 75 feet long; the boiler-room 40x60 feet. The motive power of the plant will be electricity generated at our central power-house, located at our White Oak Mills. The product will be indigo discharged printed drills or denims; output at first approximately 25,000 yards per day. We anticipate being ready to start the plant around November 1. The goods will be sold through the Cone Export & Commission Co., Greensboro and New York."

To Add 3000 Spindles.

M. C. Winston, president of the Ethel Cotton Mills, Selma, N. C., writes to the MANUFACTURERS RECORD: "The Ethel Cotton Mills will add 3000 spindles to the 5280 now in use. They are in the market for maple flooring, pulleys, shafting and belting for the new addition."

Textile Notes.

B. H. Richardson, Zebulon, N. C., is interested in plan for organizing a \$100,000 company to build a cotton mill.

The Dayton (Tenn.) Hosiery Mills has engaged C. E. Bearden of Chattanooga, Tenn., to furnish plans and specifications for the construction of the buildings for the plant. This new company was reported organized recently, its capital stock being \$60,000.

The Englewood (Tenn.) Manufacturing Co. has commenced to train knitters, and will have its finishing department operating in about two weeks. Its present building (a two-story brick structure) will take care of machinery to produce about 600 dozen pairs of hosiery daily, and one end of the building is finished so that an addition can economically be added. The present dyerroom is equipped to dye sulphur black and tans. The finishing departments are supplied with modern rotary singer and fireproof driers. The initial equipment will be 24 footers and 24 ribbers, driven by steam power, for a daily capacity of 200 dozen pairs of hose.

Pressure in Natural Gas.

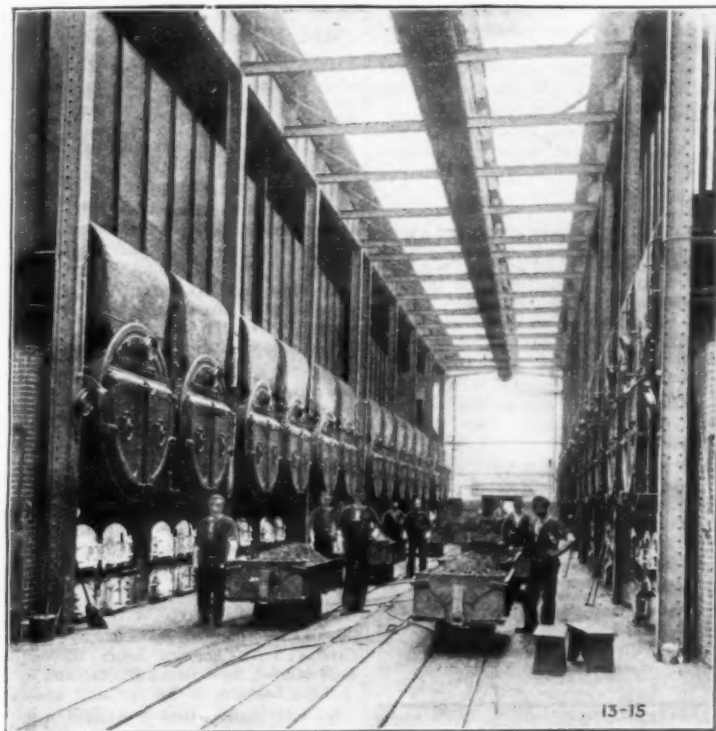
Frank Richards of New York, writing to the MANUFACTURERS RECORD with reference to the account in its issue of August 17 of the scheme for piping natural gas to Louisville, says:

"In the sixth paragraph it is said that occasional regulating stations will be needed to reduce the pressure of the gas. In such long transmissions the pressure falls and it is gas compressors which are needed to raise or restore the pressure instead of regulators or pressure reducers, and the cost is rather more than suggested in the article. The scheme as a whole is probably all right."

MECHANICAL

Coal and Ash-Handling Equipment in Power Plants.

The completeness of the coal and ash-handling apparatus in the power plant of the new print works of the Pacific Mills, South Lawrence, Mass., shows that



INDUSTRIAL RAILWAY IN BOILER-ROOM.

large industrial plants may save expense by employing efficient apparatus in the power plant as well as by the use of improved machinery in the manufacturing departments. This equipment is here-with illustrated and described as an example for other industrial power plants.

There are three distinct parts to the equipment. The first consists of a pivoted bucket conveyor, which receives the coal from the railroad cars and distributes it into the storage pocket. In addition to this conveyor, a motor-driven car distributes coal to sections of storage pocket not reached by the conveyor; the second part consists of charging cars and an industrial railway used to convey coal from the storage pocket to the boiler-room, and the third part consists of another industrial railway system for the removal of ashes.

Coal is brought to the plant in railroad cars of the bottom dumping type, and is distributed directly into a pit under the track. It then passes into a Hunt electrically-driven coal cracker, which breaks up the large chunks of bituminous coal into lumps of proper size for firing. The coal cracker discharges through a revolving filler to a Hunt pivoted bucket conveyor which runs through a tunnel and then rises, as shown in one of the accompanying illustrations, and carries coal to the distributing chutes, each of which is provided with an automatic trip, so that the coal can be discharged from the conveyor buckets into any chute desired. The motor-driven conveyor driver is located on the upper level. The conveyor is driven by a Hunt open geared pawl driver.

Besides the coal pocket shown in the illustration, there is an auxiliary row of storage bins. For filling these bins, the conveyor can be arranged to discharge into an auxiliary hopper, which is used for filling an electrically-operated car of two tons capacity, running on a track over

the storage bins. The bins have a combined capacity of 10,000 tons of coal, but are so subdivided that the individual bins can be emptied in a few minutes in case the coal commences to heat and there is any tendency of spontaneous combustion.

From the bins shown the coal is drawn off through duplex valves into Hunt boiler-room charging cars. Although these

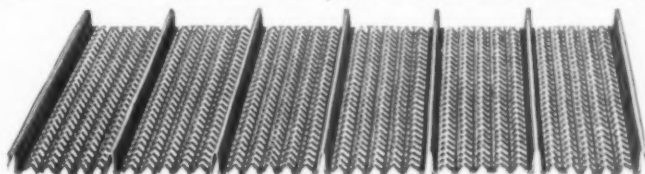
down its bottom is slightly higher than the floor of the car, so that the fireman will not catch his shovel when scooping up the coal. These cars greatly reduce the fireman's work and increase his coal-handling capacity, because the cars are at the right height and proper distance from the firedoor. This completes the coal-handling equipment, which has a capacity of 60 to 70 tons an hour, more than ample to keep the 30 boilers supplied when running at full capacity.

The ashes are removed by cars in the room underneath the boiler-room. The ash car has been designed to be practically dustproof. As soon as the car is run

inches high and 4 inches apart between centers; standard lengths 6, 8, 10 and 12 feet.

Hy-Rib is a steel sheathing stiffened by deep ribs formed from the same sheet of steel. No forms are required in applying concrete to Hy-Rib in making floors, partitions and ceilings, and in solid partitions and walls steel studs are not required.

After Hy-Rib sheets are in place, plaster or cement is applied to both sides to form the completed partition, which is less than two inches thick, rigid, and is claimed to be of good soundproof qualities. The company has issued a handbook on Hy-Rib construction, in which the vari-



SEVEN-RIB HY-RIB STEEL SHEATHING.

ous types of buildings, including residences, warehouses, factories, etc., are shown.

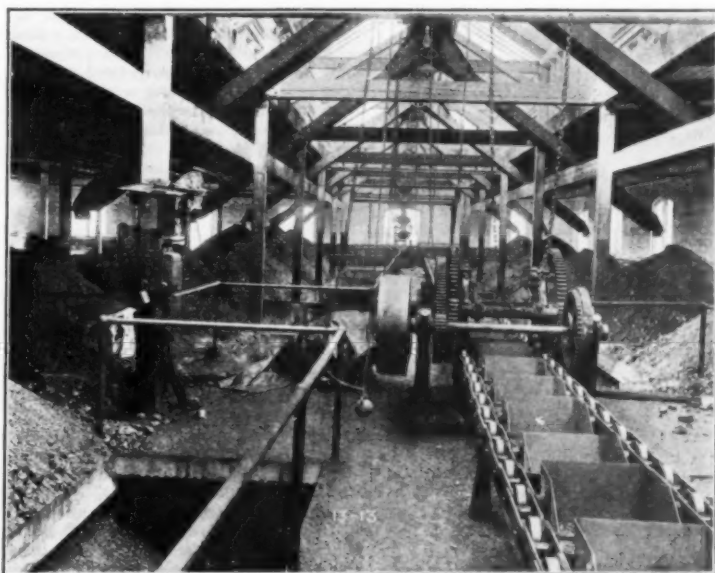
For Italian Trade.

Luigi Emilio Giacosa, via Lamarmore, 33, Turin, Italy, writes to the MANUFACTURERS RECORD as follows:

"I am interested in handling American products, especially small machinery lines for offices, banks, Government offices and departments, among whom I am already well introduced with German and English articles. I desire to work on a purely commission basis and be in connection with manufacturers without passing by the medium of general agents. American products here in the north of Italy, the most commercial, industrious and richest part of the country, are very much appreciated for their price, high-grade qualities, etc. If you can recommend us to some American manufacturers you will do us a favor by requesting them to send samples of their articles and conditions of sale."

New Type of Hy-Rib Construction.

The extensive application of the Four-Rib Hy-Rib manufactured by the Trussed Concrete Steel Co., Detroit, Mich., has led the company to still further develop



HUNT CONVEYORS FOR HANDLING COAL.

and running in full cars. This system prevents coal from being spilt around the floor and permits of maintaining an extremely neat boiler-room.

The coal cars are designed especially to facilitate firing the coal into boilers. They are made of sheet steel stiffened with angle iron, the corners rounded off for the benefit of the workmen's hands and the bottom flush riveted. When the side door is let

this form of construction for walls, partitions and ceilings by turning out the Seven-Rib Hy-Rib type shown in the illustration. It forms an improved type, is over twice as wide as the Four-Rib type, and the ribs are one-eighth inch deeper. It is handled more economically and permits wider spacing of supports.

The sheets are 24 inches wide between centers of outside ribs; the ribs are 15-16

Factory Lighting. By Clarence E. Clewell. Published by McGraw-Hill Book Co., 239 W. 39th street, New York. Clothbound, 161 pages, with numerous illustrations. Price \$2.

Good lighting is an aid to accurate workmanship and manufacturing output, and contributes to a reduction in manufacturing costs, thus making it an essential feature in factory equipment. This book aims to tell in a simple way how to obtain good lighting. As set rules are apt to be misleading, the experiences in actual installations are made the basis for analysis and explanation so that they may be useful in similar problems under varying conditions.

The scheme in the text is the treatment of illumination information from actual results, and a practical application of the text will require, therefore, a selection from one or another of the cases described to be used as a guide. The office, the drafting-room and the power-house are included under the general title "Factory Lighting." The electric lamp, rather than gas, is used in the applications, but as gas lamps involve the same general principles of illumination, in a broad sense the conclusions reached are equally applicable to either source of light. Many illustrations of lighting systems in actual operation are shown with diagrams and drawings of the arrangements of lamps to give proper illumination.

The Eastern Shore of Virginia Produce Exchange has already this year done a business of \$2,300,000.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "it is reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription to the Daily Bulletin is included for the contract period.

BRIDGES, CULVERTS, VIADUCTS

Ala., Birmingham.—City let contract Central Contracting Co., Birmingham, to erect two bridges over Village Creek at Ave. F and at 25th St.; reinforced concrete; cost \$7700; Walter G. Kirkpatrick, City Engr. (Recently noted as considering constructing system of viaducts.)

Ala., Columbia.—Columbia Bridge Co., capital stock \$3000, incorporated by W. L. Lee and others; will operate bridge across Chattahoochee River.

Ala., Rockford.—Coosa County Commissioners appropriated \$5000 to build steel bridge over Hatchett Creek.

Ark., Russellville.—City will build concrete bridge at W. Main St. Address The Mayor.

Ark., Texarkana.—Miller County Commissioners let contract George Henderson to build several bridges in connection with road construction. (See "Road and Street Work.")

D. C., Washington.—District Commissioners having new plans prepared for previously noted reinforced concrete bridge over Rock Creek at Q St.; original plans for 7 spans, but will reduce to 5; invite new bids early in Sept.; D. E. McComb, Dist. Engr., advises that bridge will have total length of 261 ft.; cost \$275,000. Plans also being prepared for Pennsylvania Ave. bridge; cost \$160,000; one 200-ft. span.

Fla., St. Petersburg.—City and Pinellas county will build bridge over Booker creek, on 9th St.; concrete; 45 ft. wide; 6-ft. side-

walks on each side, 24-ft. roadway and 9 ft. for car track; estimated cost \$20,000; Frank Estes and associates prepared plans; F. A. Wood, County Commissioner; M. W. Spencer, City Engr.

Fla., Tampa.—Atlantic Coast Line Railroad, E. B. Pleasants, Chief Engr., Wilmington, N. C., will build bridge over Hillsboro River.

Ga., Macon.—Bibb County Commissioners let contract C. W. Requaugh Co., Charlotte, N. C., at \$14,485, to build 4 reinforced concrete bridges, each 100 ft. long and 24 ft. wide, across Rocky and Tabesofee Creeks; Wilbur J. Watson, Engr., Charlotte, N. C.

Ga., Moultrie.—Colquitt county will vote on \$400,000 bonds to build steel bridges and culverts. Address County Commissioners.

Ga., Savannah.—Atlantic Coast Line Railroad, E. B. Pleasants, Chief Engr., Wilmington, N. C., will, it is reported, prepare plans and specifications for system of overhead and underground crossings.

La., New Orleans.—City let contract to Midland Bridge Co., Kansas City, Mo., at \$259 to repair Galvez St. bridge.

La., Rayville.—Second Ward, Richland parish, voted tax for bridge to be built across Boeuf River; contribute \$5000, to be supplemented by \$5000 appropriated by Police Jury. (Lately noted.)

Md., Baltimore.—Water Department, Ezra B. Whitman, Engr., will construct steel highway bridge, contract No. 15; three spans, 297 ft. center to center of end piers, and two 27-ft. approach spans carrying 20-ft. roadway over Gunpowder Falls; spans to be erected on piers and abutments provided by Water Board; bids received until Sept. 10; plans and specifications at office of Water

will construct several reinforced concrete bridges, 30 to 50-ft. span; Robert D. Hennen, County Engr.; G. B. Hartley of Monongahela Valley Engineering Co., 208 High St., in charge; county receiving bids. (See "Machinery Wanted.")

W. Va., Newell.—Newell Bridge & Street Railway, capital stock \$500,000, incorporated by Sterling Newell and others of Cleveland, O.; consolidates Newell Street Railway and Newell Bridge Co.; will construct electric railway and bridge across Ohio River.

W. Va., Charles Town.—Charles Town district, Jefferson county, defeated \$35,000 bond issue to construct bridge across Shenandoah River. (Recently noted.)

CANNING AND PACKING PLANTS

Fla., Dupont.—Dupont Canning Co. organized with H. E. Black, Prest.; H. R. Van Deusen, Secy.; F. W. Wollerton, Treas.; A. V. Burch, Mgr.; offices at 524 Miller Bldg., Scranton, Pa.; plans erecting vegetable cannery; no details decided.

Fla., Greenville.—Committee, H. W. James, Secy., will consider organization of company to establish cannery. (See "Machinery Wanted.")

Ga., Fitzgerald.—Georgia Canning Co. (L. L. Griner interested) will erect plant; 75x170 ft.; 2 stories; frame; ordinary construction; day labor; Mr. Griner recently noted to erect plant. (See "Machinery Wanted.")

La., New Orleans.—Sea Food Co. has been incorporated.

Mo., St. Louis.—Best-Clymer Manufacturing Co., 1425 International Life Bldg., let contract Kellermann Construction Co. to erect preserving plant and separate office

organization of company to manufacture tile and pottery ware. (See "Machinery Wanted.")

Tex., Crisp.—Bricks.—Crisp Press Brick Co., capital stock \$30,000, incorporated by W. P. Allen, Ben Allen and J. P. Sims.

COAL MINES AND COKE OVENS

Ala., Cordova.—Oak Leaf Coal Co. will develop two new openings connected by twin tipples; has begun grading for ¾-mile track extension.

Ala., Morris.—Burnwell Coal Mining Co., Birmingham, Ala., will not develop coal mines at Morris. (Recent report incorrect.)

Ark., Eagleton.—Tomlinson Bros., Mena, Ark., recently noted as contemplating coal development, states will investigate vanadium vein. (See "Mining.")

Kentucky.—East Kentucky Coal Co., capital stock \$2000, incorporated by F. R. Johnson and W. K. Spinney, St. Louis, Mo.; H. C. Ochterbeck, Kirkwood, Mo., and W. D. Condie, Ferguson, Mo.

Ky., Harlan.—Looney Creek Coal Co., capital \$15,000, incorporated by Charles D. Cole, George A. Clutta, Gibbs Lusk and W. E. Johnston.

Mo., Joplin.—G. H. Lucas contemplates developing coal and zinc mines.

Okla., McAlester.—Gap Oil, Gas & Coal Co. incorporated by U. G. Crane and others. (See "Gas and Oil Developments.")

Tex., Flatonia.—H. H. Harrison contemplates developing coal mines.

W. Va., Fayette.—Ajax Coal Co., capital \$100,000, incorporated by Timothy Ewing, Fayette; J. P. Chapman, Beury, W. Va.; J. T. McMaster, East Bank, W. Va., and J. J. Christie, Lookout, W. Va.

W. Va., Blaine.—Hite & Rafetto will, it is reported, develop mines.

W. Va., Rivesville.—Rivesville Coal Co., authorized capital \$75,000, incorporated by R. A. Pollock and Frank Stoner of Massillon, O.; P. D. Pollock, William Brogden and Wallace Dixon of Canton, O.

COTTON COMPRESSES AND GINS

Ark., Argenta.—E. A. Parnell, Dallas, Tex., will build \$6000 gin.

Ark., Vannale.—Farmers' Union Gin & Milling Co., capital \$3750, incorporated; J. C. Hefley, Prest.; T. D. Hare, V.-P.; W. H. Wolf, Secy.-Treas.

La., Hammond.—Hammond Planting & Manufacturing Co., H. H. Wayland, Mgr., will increase capacity of gin.

La., New Orleans.—J. A. Spori will erect cotton pickery; two stories; brick; cost \$2000.

N. C., Selma.—M. C. Winston and others will erect 4-70-saw gin; electric power.

Tex., Roaring Springs.—J. W. Simmons, Quanah, Tex., and associates will build \$12,000 gin.

COTTONSEED-OIL MILLS

Ala., Birmingham.—Porter Cotton Oil Co. organized with L. M. Porter, Prest. and Mgr.; F. W. McKee, V.-P.; E. Y. Conklin, Secy.-Treas.; will not erect mill at present; planning to lease one or two mills now in operation. (Recently noted incorporated, capital \$10,000.)

Ala., Ozark.—Edwards Cotton Oil Co., capital stock \$10,000, incorporated by W. L. Edwards and others.

La., Welsh.—Farmers' Oil Co., Ltd., has been incorporated.

S. C., Blacksburg.—Planters' Oil Mill Co. (J. L. Walker and others) purchased former Blacksburg Cottonseed Oil Co.'s plant, and will operate. (Lately noted incorporated with \$10,000 capital.)

Tex., Celina.—Farmers' Cotton Oil Co., capital stock \$30,000, incorporated by B. F. Smith, K. S. Loving and W. E. Seitz.

Tex., Gainesville.—Gainesville Cotton Oil Mill will operate mill by electricity; contracted for power.

DRAINAGE SYSTEMS

Fla., Miami.—Chambers Land Co. (E. C. Chambers, Kansas City, Mo., and others) will drain 100,000 acres Everglades land, making property available for cultivation and home building; each section to be surrounded by canal, in addition to laterals and cross canals.

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 78 and 79.

In order to secure best bids from leading engineers, contractors and investment houses, the proposal advertising columns of the Manufacturers Record are invaluable.

Rate 20 cents per line per issue.

When Proposal Advertisements cannot be sent by mail in time to secure insertion before date for opening bids, please wire advertisement copy by Night Letter.

Proposal Advertising must reach us not later than 9 A. M. Wednesday.

Engr., City Hall; previously noted. (See "Machinery Wanted.")

Md., Baltimore.—State Roads Commission, Wm. L. Marcy, Secy., 601 Garrett Bldg., will construct reinforced concrete bridge in Prince George's county over Eastern Run, etc.; bids received until Sept. 10. (See "Roads and Streets" and "Machinery, etc., Wanted.")

Mo., Joplin.—Joplin Union Depot Co., E. M. Wise, Prest., Eureka Springs, Ark., will build viaduct at Broadway; R. A. Rutledge, Ch. Engr. Atchison, Topeka & Santa Fe Railway, Topeka, Kans., preparing plans.

Tex., Angleton.—Brazoria county votes Sept. 23 on \$60,000 bonds to build bridge across Brazos River. Address County Commrs.

Tex., Liberty.—Liberty County Commissioners will construct steel highway bridge across Trinity River; bids received until Sept. 1; J. B. Simmons, County Judge. (See "Machinery Wanted.")

Va., Columbia.—Fluvanna, Cumberland and Goochland counties interested in construction of bridge across James River; cost reported as \$20,000; Dabney Mosby, Everett Mosby and others, committee.

Va., Brookneal.—Campbell County Supervisors, Rustburg, Va., will appropriate \$5000 for bridge over Staunton River, provided Brookneal contributes \$3000 and Halifax county \$2000.

Tex., Waco.—R. J. Windrow, Rd. Supt., is preparing plans and specifications for rehabilitating suspension bridge across Brazos River; will also submit plans to County Commrs. for 3-span steel bridge to cost about \$40,000.

W. Va., Bloomfield (not a postoffice).—Norfolk & Western Railway, C. S. Churchill, Chief Engr., Roanoke, Va., will, it is reported, build bridge requiring 550 tons steel.

W. Va., Morgantown.—Monongalia county

building; former 61x248½ ft.; 3 stories and basement; loading platform 13½x248½ ft., with basement extending under it; basement and first floor of reinforced concrete; upper floors of joist construction, with iron columns, steel girders and brick walls; exterior walls faced with shale brick; kitchens lined with enameled brick; office building 52x27½ ft.; 1 story; shale brick with algonite trimmings and enameled brick walls; total of 100,000 sq. ft. floor space; estimated cost \$100,000; plans by Clymer & Drischler. (Previously noted.)

Tex., Eagle Lake.—Eagle Lake Fruit & Canning Co. (Kolberg & Anderson, Mgrs.) will erect galvanized-iron 30x60-ft. building; install steam preserving kettles, sterilizing vats and fig washing machinery; can and preserve figs, vegetables and fruits. (Recently noted.)

Tex., Houston.—Texas Provision Co. has plans by John McLelland, Beatty Bldg., Houston, for building plant; 100x150 ft.; plans and specifications for entire mechanical equipment and installation by Robert M. McCandlish Engineering Co., consulting engineer, 723 Midland Bldg., Kansas City, Mo. (Recently noted incorporated, \$300,000 capital stock, by J. M. Hussey and others, and to erect plant to cost \$100,000.)

Va., Suffolk.—Smithfield Packing Co., maximum capital stock \$24,000, incorporated with C. C. Phillips, Prest.; W. J. Gray, V.-P.; N. R. Withers, Secy.-Treas.; pack meat and its products.

CLAYWORKING PLANTS

Md., Baltimore.—Hollowware.—Jones Hollowware Co., Madison and Forrest Sts., will build enameling-house at 915-917 Ashland Ave.; brick; 52x111 ft.

N. C., Wilmington.—Tile and Pottery.—Scul & McNorton, 103 Princess Bldg., are attorneys for clients interested in proposed

La., Lafayette.—Drainage District No. 1 defeated \$100,000 drainage bonds; L. L. Judice, Secy. (Lately noted.)

La., Napoleonville.—Police Jury adopted ordinance creating Assumption, Lafourche and Terrebonne Drainage District; about 500,000 acres; appointed Clarence C. Barton commissioner for Assumption, J. V. H. Beary for Lafourche and Jack J. Shaffer for Terrebonne parishes; proposes constructing canal from Canebrake Canal, in Assumption parish, to Gulf of Mexico through Terrebonne parish.

Miss., Jackson.—War Department, Washington, D. C., has had surveys made of Big Black River preparatory to construction of drainage and reclamation system; drainage district organized.

N. C., Dunn.—Stewart's Drainage District contract, previously noted awarded to Southern Drainage & Construction Co., Kinston, N. C., calls for 8.8 miles small canals 4 ft. wide, 4 ft. deep, and 6 miles dredge canals 20 ft. wide, 6 ft. deep; drain 7000 acres for agriculture. (See "Machinery Wanted.")

N. C., Statesville.—Upper Third Creek Drainage District let contract L. O. White, Statesville, at \$12,500 to dredge portion of creek; 8 miles long; 20 ft. wide; 8½ ft. deep; yardage 185,000.

S. C., Anderson.—Anderson Chamber of Commerce, Porter A. Whaley, Secy., interested in plan to drain 1000 acres land. (See "Machinery Wanted.")

ELECTRIC PLANTS

Ala., Columbiana.—Columbiana Ice, Light & Power Co., capital stock \$25,000, incorporated by J. H. Crumpton and others.

Ark., Prairie Grove.—City contemplates installing electric light and water plant to cost \$50,000. Address The Mayor.

Fla., Lakeland.—City will install larger machinery in electric-light plant. Address The Mayor.

Fla., Lakeland.—Lakeland Dairy Farm contemplates installing electric system. Address A. J. MacDonough. (See "Machinery Wanted.")

Ky., Henderson.—City will improve electric-light plant and install machinery; cost about \$25,000. Address The Mayor.

La., Litcher.—J. H. Jastremski, Houma, La., will build power and ice plant; machinery ordered.

Mo., Chaffee.—City authorized City Council to contract with J. J. Astor, representing Missouri Public Utilities Co., Cape Girardeau, Mo., which plans to purchase Astor plant and make improvements. A. M. Tinsley, local manager, advises that electricity for Chaffee will be supplied from Cape Girardeau.

Mo., Calnesville.—Missouri Electric, Gas & Water Co. contemplates constructing one-half mile distributing system; expects to purchase engine, A. C. current generator, rotary converter and miscellaneous electrical appliances.

N. C., Whiteville.—Town Commissioners considering plans suggested by J. B. McCrary Company, Atlanta, Ga., for electric-light plant and water-works.

S. C., Kingstree.—Kingstree Electric Light & Ice Co. increased capital stock from \$15,000 to \$25,000.

S. C., Newberry.—City votes Sept. 1 on \$30,000 bonds to purchase electric-light plant and water-works under construction by J. B. McCrary Co., Atlanta, Ga.

Tex., Weatherford.—City of Weatherford Water, Light & Ice Co. increased capital stock from \$80,000 to \$90,000.

Va., Staunton.—Board of Aldermen decided to build municipal electric-light plant to cost about \$23,000; ordered that site for buildings be purchased; will also supply power to pump water. Address The Mayor. (Recently mentioned.)

W. Va., Wheeling.—Peterson Electric Co., capital \$10,000, incorporated by Jos. A. Armstrong and Hugo Peterson, Wheeling; Chas. A. Peterson and Harry Brandfass, Warwood, W. Va., and others.

FERTILIZER FACTORIES

Ala., Brewton.—Robbins & McGowan Co., J. E. Finlay, Pres., states recently-noted building partially completed; ordinary construction; 100x200 feet; remove machinery from smaller building; no further equipment needed; capacity 35 tons daily.

La., Shreveport.—P. O. at Kenner.—Planters' Fertilizer Co. will install 500 H. P. motor and operate plant by electricity; New Orleans Railway & Light Co., New Orleans, will extend electric system to furnish power.

Md., Baltimore.—American Agricultural

Chemical Co., 1015 Fidelity Bldg., will erect 2 additional buildings at Lazaretto plant; each 2 stories; 69x116 ft.; brick; fireproof.

Tex., Mansfield.—Mansfield Cotton Oil Co. increased capital stock from \$40,000 to \$50,000; will establish fertilizer plant.

Tex., Marshall.—Marshall Fertilizer Co. will install additional machinery, increasing daily capacity to 250 tons fertilizer; also erect warehouse. (See "Warehouses.")

FLOUR, FEED AND MEAL MILLS

Ark., Vandalia.—Farmers' Union Gin & Milling Co. incorporated; J. C. Hefley, Pres. (See "Cotton Compresses and Gins.")

La., Lake Charles.—Lake Charles Grain Co. will build feed mill and grain elevator.

Mo., California.—Gattermeier Milling Co. increased capital stock from \$5000 to \$18,000.

Mo., Summersville.—Byron DeForest, Ben H. DeForest and Dr. W. E. DeForest purchased mill; remodel from two-break four-reduction to three-break four reduction system; install No. 2 2 B planifier to replace rotary bolter, add dust collector to purifier, regrind and corrugate rolls, etc.

N. C., Shelby.—W. R. Hartness purchased four-story brick building and will install flour-milling machinery; four stands; steam power; daily capacity 100 barrels; cost \$10,000 to \$12,000; operate as Eagle Roller Mill.

Tenn., Knoxville.—Purina Mill Co., St. Louis, Mo., purchased properties Just Mill & Feed Co.; reported to enlarge operations.

Tenn., Memphis.—Aunt Patsy Feed Co., capital stock \$50,000, incorporated by J. P. Gentry, S. B. Anderson, A. D. Armstrong, A. L. Lowenstein and others.

Va., Blackstone, R. F. D. No. 1.—D. R. Newman contemplates installation of small flour mill. (See "Machinery Wanted.")

FOUNDRY AND MACHINE PLANTS

Ala., Anniston.—Soll Pipe, etc.—Standard Foundry Co. will incorporate with \$100,000 capital stock; will construct plant for annual capacity 10,000 tons soll pipe and fittings; main foundry building 250x100 feet, pattern and machine shops, administration building, etc.; concrete foundations and wood superstructures; electric power with individual motors; reported Sam F. Morris will be Mgr. and Frank Carrington, Asst. Mgr.

D. C., Washington.—Tag Machine.—Standard Tag Machine Co., \$50,000 capital stock, incorporated by Charles H. Raiben, Logansport, Ind.; George F. Hullings, 151 N. Carolina Ave. S. E., and David P. Moore, 710 H St. N. W., both of Washington.

Ga., Savannah.—Ship Repairing.—Wilkinson Machine Co. leased Jones Wharf on River St., fronting 150 ft. on river; will erect two 2-story brick buildings, extend wharf 40 ft. to harbor line and dredge slip 70 ft. deep and 40 ft. wide for docking vessels for machinery repairs; buildings will contain machine, foundry, boiler, copper-smith, blacksmith and pattern shops; will remove equipment from plant at Abercorn St. and Bay La. and engage in all ship work except drydock repairs.

Ky., Louisville.—Rindt Company, capital stock \$30,000, incorporated by Louis Rindt, Carl Rindt, Otto Seelbach, Leonard Kraus and others.

Md., Baltimore.—Stoves.—S. B. Sexton Stove & Mfg. Co., 7-9 S. Gay St., will erect building at Conway and Little Greene Sts.; 2 stories; 67x120 ft.; brick, terra-cotta, iron and steel; concrete foundation; electric elevator; plans by Mottu & White, 322 N. Charles St., Baltimore.

Mo., St. Louis.—Cars, etc.—American Car & Foundry Export Co., 165 Broadway, New York, \$500,000 capital, organized with Fredk. H. Eaton, Chmn. of Board; H. H. Woodin, Pres.; Chas. S. Gawthrop, Wilmington, Del., and C. L. Rodgers, London, Eng., V-Pts.; S. S. DeLano, Treas.; Wm. M. Hager, Secy.; Mr. Rodgers in charge of London office. (Recently noted formed to handle export trade of American Car & Foundry Co.; plants at St. Louis, St. Charles, Memphis, etc.)

Okla., Tulsa.—Oil Well Supplies.—McEwen Company will erect foundry, blacksmith shop and warehouse.

Okla., Oklahoma City.—Thrashing Machines.—Oklahoma Thrashing Machine Co., 628 W. 2d St., will be organized by Don A. Radle and others to manufacture small thrashing machines; leased quarters; recently noted. (See "Machinery Wanted.")

GAS AND OIL ENTERPRISES

Kentucky.—Mayhugh-Harshbarger Oil & Gas Co., authorized capital \$50,000, incorpo-

rated by I. J. Harshbarger, Paul W. Scott, E. E. Williams, H. T. Lovett, G. A. Koontz, all of Huntington, W. Va.; will drill for oil and gas in Kentucky; construct pipe lines, etc.

La., Burnside.—Oil Tank.—Miles Planting & Mfg. Co. will build 6000-gal. oil tank.

La., Chalmette.—Oil Refinery.—New Orleans Terminal Co., New Orleans, La., negotiating with Baltimore capitalists seeking site at Port Chalmette for construction of large oil refinery; wires Manufacturers Record: "Proposition not in shape to give information."

La., Church Point.—Church Point Oil & Mineral Co. organized with H. Boussee, Pres.; Edward Daigle, V-P.; Laurent Barousse, Treas.; Lloyd Franques, Secy.

La., Jennings.—Creole.—Caddo Oil & Mineral Co., capital stock \$40,000, incorporated; A. E. Artego, Pres., Crowley, La.; J. P. Smith, Secy., Vivian, La.

La., Lake Charles.—Texas Co., Houston, Tex., purchased properties of Louisiana Co.; these include 185 miles of oil-pipe line, 67 steel tanks of 1,382,000 gals. capacity, 12 earthen tanks of 2,191,000 gals. capacity, pumping stations, gathering lines and tank farms, telegraph and telephone lines, etc.; will continue operation and developments; all in Louisiana oil fields.

La., Raymond.—Raymond Oil & Pipe Line Co., capital stock \$100,000, organized to drill for oil, lay pipe lines, etc.

La., Shreveport.—Pasadena Petroleum Co., authorized capital \$3,000,000, incorporated; J. S. Cullinan, Pres.; T. J. Donoghue and J. C. McCue, V-Ps.; Hampden Story, Secy.; Ira McFarland, Treas.

Mo., Moberly.—Moberly Oil Co. increased capital stock from \$8000 to \$32,000.

Okla., Ardmore.—Crystal Oil Co., capital stock \$30,000, incorporated by Ray M. Johnson, T. T. McGee, S. A. Apple and others.

Okla., Conlon.—C. D. Webster Oil Co., capital \$50,000, incorporated by C. D. Webster, John Kincaid and John Wright.

Okla., Coalgate.—Alamo Oil & Gas Co., capital stock \$25,000, incorporated by Geo. E. Trice and E. Moore of Coalgate; Geo. W. Tromlitz, Ed Walker of San Antonio, Tex., and others.

Okla., Cushing.—Commercial Gas Co., capital stock \$25,000, incorporated by John H. Bellis, Milton Thompson, Joseph F. Foster, A. L. Treese and others.

Okla., Lavina (not a postoffice).—Dan Huett, James W. Stein, L. C. McLean and others of Enid, Okla., organized company to drill for oil near Lavina.

Okla., McAlester.—Gap Oil, Gas & Coal Co., capital stock \$40,000, incorporated by U. G. Crane, R. T. Chandler and H. B. Rowley of Kiowa, Okla., and others.

Okla., Muskogee.—Veracruz Oil Co., capital stock \$25,000, incorporated by G. A. Hodgman, R. N. Greenslade, H. A. Wilson, John N. Mosler and E. A. O'Bannon.

Okla., Muskogee.—Best Test Oil & Gas Co., capital stock \$10,000, incorporated by J. H. Mobley, W. R. Davis and C. T. Burns.

Okla., Oklahoma.—American National Oil & Gas Co., capital \$30,000, incorporated by Al G. Patterson, J. W. Pryor and R. H. Gardner.

Okla., Oklahoma.—Producers' Mutual Oil & Gas Co., capital \$100,000, incorporated by H. D. East, M. G. Rashad and C. W. Hill.

Okla., Oklahoma City.—Midland Petroleum Corporation, capital stock \$20,000, chartered by Charles White, James S. Gladish, Frank H. Foster and others.

Okla., Oklahoma City.—Finley Oil & Gas Co., capital stock \$10,000, incorporated by S. B. Finley, E. E. Kirkpatrick and O. M. Boynton.

Okla., Oklahoma City.—Guarantee Petroleum Co., capital stock \$12,500, incorporated by A. S. Harris, Dudley B. Ellis and John M. Young.

Okla., Oklahoma City.—Oklahoma Oil & Gas Co., capital stock \$100,000, incorporated by Ed. L. Joyce, G. T. Garner and Geo. S. Rusco.

Okla., Okmulgee.—Subway Drilling Co., capital \$10,000, incorporated by W. Thornburg, O. D. Stansburg and W. T. Foley.

Okla., Tulsa.—Evans Oil Co., capital \$3600, incorporated by C. D. Evans and N. O. Colburn, Collinsville, Okla.; Arthur L. Murphy, Tulsa.

Okla., Okmulgee.—Flusche Oil Co., capital stock \$16,000, incorporated by W. Thornburg, O. D. Stansburg and W. T. Foley.

Tex., Beaumont.—Park Farm Oil Co., capital stock \$10,000, incorporated by W. C. Keith, T. H. Hunter, Jr., and George G. Anderson.

Tex., Belton.—Belton Oil & Gas Co., capital stock \$5000, incorporated; E. C. Claibough, Pres.; W. C. Rittiger, V-P.; Fred Muehlhouse, Treas.; T. H. Garrison, Secy.

Tex., Clay County.—Alawana Oil Co., capital stock \$20,000, incorporated to drill on 160 acres in Clay county; Leo Wohlgenuth, Pres.; A. A. Weiss, 1st V-P.; Secy.; J. E. Rueschoff, 2d V-P.; A. Von Hoffman, Treas., all of St. Louis, Mo.

Tex., Fort Worth.—Sterling Oil Co., capital stock \$15,000, incorporated by Sterling P. Clark, C. W. Stanton and Joe A. Vera.

Tex., Houston.—Central Petroleum Co. incorporated with capital \$6,000,000 preferred and \$900,000 common stock; J. S. Cullinan, Pres., Houston; E. C. Lufkin, 1st V-P., New York; J. E. Crosbie, Treas., Tulsa, Okla.; A. L. Beatty, Secy., New York.

Tex., Stamford.—Jones County Oil & Gas Co., capital stock \$25,000, incorporated; H. F. Hosen, Pres.; J. R. Pratt, V-P.; B. P. Davenport, Secy.—Treas.

Va., Richmond.—Gas Plant.—Manchester Heat, Light & Power Co. petitioned Street Committee for authority to extend mains in Manchester.

W. Va., Boomer.—Jacks Branch Oil & Gas Co., capital stock \$25,000, incorporated by C. W. Osenton and T. J. Davis of Fayetteville, W. Va.; A. W. Mankin and M. J. Simms of Montgomery, W. Va., and others.

W. Va., Middlebourne.—Consumers' Gas Co., capital stock \$25,000, incorporated by O. B. Conway of Middlebourne, Clyde B. Johnson of Charleston, W. Va.; E. A. Sweeney of Marietta, O., and others.

ICE AND COLD-STORAGE PLANTS

Ala., Columbiana.—Columbiana Ice, Light & Power Co., capital stock \$25,000, incorporated by J. H. Crumpton and others.

Fla., Fernandina.—City voted \$60,000 bonds to construct ice plant, dock and recreation pier. Address The Mayor. (Previously mentioned.)

Fla., Lakeland.—Lakeland Dairy Farm contemplates installing home refrigerating plant. Address A. J. MacDonough. (See "Machinery Wanted.")

La., Litcher.—J. H. Jastremski, Houma, La., will build ice and power plant; machinery ordered.

La., New Orleans.—Federal Fruit & Cold Storage Co., capital stock \$300,000, incorporated by C. H. Ellis, E. G. Simmons, James L. Wright and others.

Mo., Columbia.—Hetzler Bros. having plans prepared by Robert M. McCandlish Engineering Co., consulting engineer, 723 Midland Bldg., Kansas City, Mo., to rebuild 2 ice tanks and erect chillroom.

S. C., Charleston.—Consumers' Ice Co. will increase capital stock from \$75,000 to \$150,000; proposes increasing daily capacity from 80 to 150 tons.

S. C., Spartanburg.—J. W. Bell, W. Main St., is interested in proposition to establish cold-storage plant. (See "Machinery Wanted.")

S. C., Kingstree.—Kingstree Electric Light & Ice Co. increased capital stock from \$15,000 to \$25,000.

Tenn., Franklin.—Mr. Rollins will rebuild ice plant lately reported burned; daily capacity 18 tons.

Tenn., Franklin.—Tyler J. Rascoe and John Denton promoting organization of company, capital \$30,000, to build ice plant, 20 tons daily capacity.

Tex., Laredo.—Consumers' Ice & Fuel Co. contemplates improvements to plant; erect 2000-ton ice-storage and several cold-storage rooms; plans and specifications by Robert M. McCandlish Engineering Co., consulting engineer, 723 Midland Bldg., Kansas City, Mo.

Tex., Weatherford.—City of Weatherford Water, Light & Ice Co. increased capital stock from \$80,000 to \$90,000.

IRON AND STEEL PLANTS

Va., Roanoke.—Rolling Mill.—Roanoke Refined Iron Co., maximum capital \$500,000, incorporated; Delano C. Thomas, Pres.; W. G. Hughes, V-P.; L. S. H. Gable, Secy.—Treas.; all of Pittsburgh, Pa. Mr. Gable wires Manufacturers Record: "Company purchased and will operate Roanoke Rolling Mills; with use of new alloy, Pittsburgh executive and skilled labor organization expect to produce 300 tons high tensile iron per day; operations commence in near future."

LAND DEVELOPMENTS

Ala., Gadsden.—F. M. Brannon Realty Co., F. M. Brannon, Pres., will expend \$50,000 to \$100,000 to develop 110 acres in West Gadsden

and 243 acres in North Gadsden; probably open bids Oct. 1; contracts probably let locally; engineer not selected; will increase capital stock from \$30,000 to \$75,000. (Recently noted.)

Ark., Little Rock.—South Arkansas Land Co., capital \$5000, incorporated; C. S. Early, Pres.; J. C. Russell, V.-P.; H. R. Solomon, Secy.-Treas.

Fla., Dunnellon.—W. S. Blackburn, St. Petersburg, Fla., and associates organized company with \$100,000 capital; purchased 25,000 acres land and will develop.

Fla., Fort Myers.—Starnes-Darrow Land & Development Co., C. L. Starnes, Pres., will develop 60 acres of land for residential and factory sites; improvements include clear land, grading streets, etc.; cost \$10,000; Davidson & White, engineers, Fort Myers. (Recently noted incorporated, capital stock \$30,000.)

Fla., Marydia (not a postoffice).—Colony of Marydia, James O. McBride, Secy., Kissimmee, Fla., will develop 62 acres as subdivision for fruit and truck gardening; cost of improvements \$30,000; construction proposals opened about January 1 or 15, 1914. Recently noted incorporated with \$10,000 capital stock. (See "Machinery Wanted.")

Fla., Parish.—Manatee Valley Land & Development Co., Frank Bennett, Pres., Des Moines, Ia., purchased 15,000 acres near Manatee and will develop; divide into 40-acre tracts; Hiram McElroy, Tampa, Fla., made surveys.

Fla., Pensacola.—Geo. W. Stahl, Chicago, Ill., purchased 80 acres land and will plant fruit orchard; let contract for clearing and fencing.

Fla., St. Petersburg.—City votes Oct. 7 on \$15,000 bonds for improvements at Reservoir Park; M. W. Spencer, City Engr. (See "Miscellaneous Construction.")

Ga., Savannah.—Whiteside Realty Co., capital \$21,000, incorporated by Geo. B. Whiteside, Sam M. Whiteside and Sarah R. Fry.

La., New Orleans.—Massachusetts Colonizing Co., capital stock \$150,000, organized by R. L. Millette, L. Y. Fontaine and John T. Jayne to locate colonies of farmers (principally from Massachusetts) in Louisiana; specialize in reclaimed lands, but also establish colonies on plantation and cut-over tracts.

La., Vidalia.—Tensas Planting Co., capital \$500,000, incorporated to operate 1 plantations in Concordia and Tensas parishes formerly owned by Green estate; E. Samuels, Pres.; E. M. Ratcliff, V.-P.; both of Natchez, Miss.

Md., Annapolis.—Navy Department, Washington, D. C., approved purchase of 750 acres as site for dairy and stock farm for Naval Academy; will remodel majority of buildings now on tract and erect additional structures.

Md., Frederick.—Swastek Realty Co. of Martinsburg, W. Va., purchased 35 acres land and will develop for residential suburb; macadamize streets, pave sidewalks, construct sewer, gas and water systems, etc.; engaged George Birnap, Washington, D. C., as landscape architect.

Md., Cumberland.—Cumberland Orchard Co., capital stock \$15,000, incorporated by Eugene Lands, Henry L. Dougherty and Charles Beamer.

Miss., Bay St. Louis.—Coast Realty Co., capital stock \$20,000, incorporated by R. R. Perkins, Charles Robinson and W. J. Gex.

Mo., Joplin.—City Council repealed ordinance calling for election Aug. 26 to vote \$175,000 bonds for park and boulevard system. Jesse F. Osborne, Mayor. (Recently noted.)

Mo., Pittsburg.—City votes Sept. 23 on \$9000 bonds to purchase Lake Park and convert into public park. Address The Mayor.

N. C., Rosman.—Rosman Improvement Co., authorized capital \$25,000, incorporated by A. M. White and others.

N. C., Charlotte.—Realty Improvement Corporation, authorized capital \$75,000, chartered by J. F. Flowers, J. Lawrence Jones and others.

Okla., Coalgate.—City voted \$5000 park bonds. Asa Montgomery, City Clerk.

Okla., Pryor.—Bates Development Co., capital stock \$10,000, incorporated by J. W. Harrison, J. F. Kern of Butler, Mo., and E. R. Harrison of Greenbrier, Okla.

S. C., Greenville.—Greenville Cemetery Association organized with J. Melvin Clark, Pres.-Treas.; W. C. Cleveland (Greenville) and W. E. Beckham (Atlanta, Ga.) V.-Ps.; J. H. Wiggins, Secy.; purchased property near Greenville; engaged Randolph B. Bailey, landscape architect, to prepare plans for cemetery; 9000 lots; construct driveways,

parks, lawns, etc.; offices in Cleveland Bldg. (Lately reported organized with \$100,000 capital stock.)

S. C., Sumter.—Carolina Land Co., capital \$40,000, incorporated; Neill O'Donnell, Pres.; D. D. Moise, Secy.; Isaac Schwartz, Treas.

Tex., New Braunfels.—Comal Springs Nursery, capital stock \$10,000, incorporated by Otto Locke, Hermann Locke and Herman Thiele.

Tex., Turnersville.—Turnersville Townsite Co., capital stock \$8000, incorporated by E. S. Wallace, G. Boone and J. W. Garren.

Tex., San Antonio.—Leona Valley Farms Co., capital stock \$23,000, incorporated by W. F. McCaleb, Oscar Dewees and J. L. McCaleb.

Va., Monterey.—Bolar Springs Development Co. (Joseph S. Gibson, Monterey, interested) will develop Bolar Spring property recently noted purchased by H. M. Lewis, Staunton, Va.; A. V. Huyler, New York, and others. (See "Hotels.")

W. Va., Huntington.—Canebrake Land Co., capital stock \$200,000, incorporated by C. W. Campbell, D. W. Brown, C. N. Davis and others. Mr. Campbell, 835 4th Ave., states company owns 4000 acres on Guyandotte River, Mingo county; no improvements at present.

W. Va., Parkersburg.—J. W. Dudley Sons Co., authorized capital \$50,000, incorporated by Brainerd J. Dudley, Albert G. Dudley, Ernest Hieble, Elizabeth Dudley and others.

LUMBER MANUFACTURING

Ga., Brunswick.—Lang & Orr will rebuild planing mill damaged by fire at estimated loss of \$20,000.

Ky., Hazard.—Perry Lumber & Supply Co. (H. C. Minnich, J. L. Johnson, S. A. D. Jones and E. H. Brashear) has organized; \$5000 capital; operate 2 sawmills and planing mill, and retail building materials.

La., Kinder.—Calcasieu Valley Lumber Co. has been incorporated.

La., New Orleans.—J. G. Rainwater Lumber Co., 609 Whitney Bank Bldg., organized with J. G. Rainwater, Pres. and Mgr.; John M. Upton, V.-P.; L. P. Cooper, Secy. (Recently noted incorporated; capital stock \$25,000.)

Mo., Deering.—Wisconsin Lumber Co., H. F. Perkins, Pres., Harvester Bldg., Chicago, Ill., is erecting sawmill by company force; mill construction; 150x50 ft.; cost of building and machinery \$80,000; machinery orders placed; daily capacity 75,000 ft. hardwood. (Recently noted.)

Mo., St. Louis.—South Side Lumber Co., capital stock \$35,000, incorporated by Louie J. Gamble, H. J. Gamble and O. L. Gamble.

Mo., St. Louis.—Trio Lumber Co. incorporated by Robert Kamin, Truman C. Bledso and Wirt M. Kingsberry; capital stock \$2000.

N. C., Franklin.—Reynolds Bros. Lumber Co., authorized capital \$50,000, incorporated by Gordon E. Reynolds, J. W. Reynolds and others.

N. C., Raleigh.—C. J. Lassiter, R. F. D. No. 1, will build lumber plant; steam power.

S. C., Inman.—Moore Lumber & Mfg. Co., L. Moore, Secy.-Treas., removed from Lancaster; consolidated with Inman Builders' Supply Co.; will operate sawmill, drykiln and planer and conduct retail builders' supply business; machinery purchased.

Tenn., Dover.—Artman, Nichols & Cox Lumber Co. of Metropolis, Ill., purchased white oak timber lands and will develop.

Tex., Keltys.—Frost Lumber Co., capital stock \$9000, incorporated by J. H. Kurth, S. W. Henderson and Eli Wiener.

Va., Suffolk.—Dill-Cramer-Truitt Corporation, Lewis Dill, Baltimore, Md., Pres., opens proposals Jan. 1 for erection of 150x50-ft. sawmill, 6 kilns, sheds and box shops; mill construction; daily capacity 75,000 ft. (Recently noted.)

W. Va., Charleston.—Adams Lumber Co., capital \$50,000, incorporated by R. S. Spilman, H. B. Smith, Duke W. Hall and others.

MINING

Ark., Eagleton.—Vanadium.—Tomlinson Bros., Mena, Ark., state arranging to investigate vein of vanadium in Polk county.

Mo., Aurora.—Zinc and Silicate.—Moffit & Doran contemplate developing zinc and silicate deposits.

Mo., Galena.—J. M. Short, Joplin, contemplates developing mining property.

Mo., Joplin.—Lead and Zinc.—Old Jordan Mining Co., capital stock \$80,000, incorporated by A. F. Dexter, John J. Wolfe and J. F. Dexter.

Mo., Joplin.—Zinc.—G. H. Lucas contemplates developing zinc and coal mines.

Mo., St. Louis.—Columbia Quarry Co. increased capital stock from \$60,000 to \$90,000.

Mo., Thoms Station, R. F. D. from Webb City.—Lead and Zinc.—Pocatella Mining Co. (Dan Glade and associates) will develop mines on 10-acre lease; contemplates building mill.

Okla., Valliant.—Asphalt.—R. Morris contemplates developing asphalt deposits covering about 90 acres.

S. C., St. George.—Copper.—St. George Cotton Oil Manufacturing Co. contemplates, it is reported, developing copper deposits.

Tenn., Nashville.—Gravel.—Tennessee Gravel Co., 911 Stahlman Bldg., organized with Daniel A. Lindsey, Pres.; Wm. H. Lindsey, V.-P.; Robt. M. Davis, Secy.-Treas. (Recently noted incorporated, capital stock \$250,000; machinery installed; plant about completed.)

MISCELLANEOUS CONSTRUCTION

Ala., Fairhope.—Pier.—Magnolia Beach Co., capital \$5000, will erect pier at Magnolia Beach near Fairhope; Malcolm Goodbrad is interested.

Fla., Clearwater.—Pier.—City rejected bids to construct steel reinforced concrete pier; probably take no further action until additional funds are available; R. T. Daniel, City Clerk. (Call for bids lately noted.)

Fla., Fernandina.—City voted \$60,000 bonds to construct dock and recreation pier and ice plant. Address The Mayor. (Previously mentioned.)

Fla., Pablo Beach.—Pier.—Pablo Pier & Hotel Co., R. S. Hall, Pres., Ocala, Fla., has plans for reinforced concrete pleasure pier extending 800 ft. into ocean, including fishing pier 100 ft. long; amusements will include dancing pavilion, convention hall, moving picture and vaudeville theater, etc.; cost \$150,000; will also erect 150-room hotel.

Fla., St. Petersburg.—Dredging.—W. A. Walsingham plans improving 20 acres fronting one-quarter mile on Salt Lake; proposes to dredge and fill in front of lake, build seawall and boulevard, etc.

Fla., St. Petersburg.—Water-front Improvements, etc.—City votes Oct. 7 on \$27,050 improvement bonds to include: Water front, \$43,500; Bayboro harbor, \$41,850; Reservoir Park, \$15,000; Incinerator, \$20,000; paving, \$30,500; water-works, \$41,000; woman's building, \$7000; M. W. Spencer, City Engr.

Fla., Tampa.—Estuary Improvement.—Secy. of War approved plans by Benjamin Thompson, Tampa, for development of Ybor Channel or "The Estuary;" plans provide for exceeding four miles of pier front, with municipal railway serving piers and connecting with railways entering city; streets 60 to 125 ft. wide immediately adjoining area of pier development, providing modern equipment for conveying merchandise; War Department plans (dredging formerly in progress, but now ceased) were for 24 ft. water in channel; movement now on foot to have depth increased to 30 ft. M. W. Carruth, Pres. Port Commission. (Proposed estuary improvement heretofore noted.)

Ga., Augusta.—Levee.—City Council authorized Mayor to arrange for \$200,000 loan to extend levee work. Nisbet Wingfield, City Engr.

Ga., St. Marys.—Docks.—Atlantic, Waycross & Northern Railroad let contract to Burns & Dickey to construct docks for lumber and cross-ties; ordinary construction; cost \$5000.

La., Fort Jackson.—Wharf.—Office Constructing Quartermaster, 614 Whitney-Central Bldg., New Orleans, La., receives bids until Sept. 13 to build wharf. Information on application. Wm. O. Smith, Capt. Q. M. Corps.

La., New Orleans.—Levee.—Col. Sidney F. Lewis, engineer, recommended to Orleans Levee Board levee enlargement work along east bank, 19,750 ft. to Aurora, Mo., involving 500,000 cu. yds. material; cost \$125,000 to \$150,000.

La., New Orleans.—Levee.—Mississippi River Commission, Fourth District, United States Engineer Office, awarded contract to Wood Construction Co., New Orleans, La., for 100,000 cu. yds. on Ashton levee in Lafourche District; R. T. Clark & Co., Natchez, Miss., for 51,000 cu. yds. on Palo Alto levee in Lower Tensas District, and Southern Dredging Co., Mobile, Ala., for 152,000 cu. yds. on Southwood levee in Pontchartrain District; will let contracts August 29 for 491,500 cu. yds. in Atchafalaya, Lafourche, Barataria and Lake Borgne districts; later let contracts for 629,000 cu. yds. in Lower Tensas District. (Call for bids lately noted.)

La., Shreveport.—Caddo Levee District, J.

M. Sentell, Pres., receives bids until Oct. 1 for earthwork, Twelve Mile bayou, to cross bayou channel way; excavation about 1,000,000 cu. yds. (See "Machinery Wanted.")

La., Tallulah.—Levee.—Fifth Louisiana Levee District Commissioners contemplate issuing \$250,000 levee bonds.

Md., Baltimore.—Piers.—Baltimore & Ohio Railroad, F. L. Stuart, Ch. Engr., will enlarge present open Pier 5, providing 56,000 sq. ft. additional pier space; planned to extend pier to total length of 800 ft. and widen 4½ ft. on west side, raising annex to present brick warehouse on east side of pier and lengthening boat slip 100 ft.; width of pier to be 69 ft.; also proposed to build raised platform on west side extending full length of pier; 4 railroad tracks.

Okla., Guthrie.—Lake.—Gulf, Colorado & Santa Fe Railway, F. Merritt, Ch. Engr., Galveston, Tex., let contract to construct 200-acre lake; \$80,000 appropriated.

Tex., Aransas Pass.—Dredging.—Government will dredge harbor at Aransas Pass and channel from Aransas Pass to Corpus Christi, Tex.; bids received until Sept. 11 at United States Engr's Office, C. S. Riche, Lieut.-Col. Engineers, Galveston, Tex. (See "Machinery Wanted.")

Tex., Austin.—City contemplates constructing low dam across Colorado River in addition to structure now being built. Address The Mayor.

Tex., Freeport.—Houston & Brazos Valley Railroad, T. G. Banks, Supt., will build 2 piers on Brazos River.

Tex., Freeport.—Piers.—Houston & Brazos Valley Railway Co., T. G. Bank, Supt., will build two piers on east side and on west bank of Brazos River.

Va., Harrisonburg.—Heating Plant.—A. R. Rosenberger, 408 First National Bank Bldg., is interested in proposed installation of central heating plant. (See "Machinery Wanted.")

Va., Roanoke.—Tunnel.—City appropriated \$4000 to extend Church Hill tunnel. Charles E. Bolling, City Engr.

MISCELLANEOUS ENTERPRISES

Ark., Little Rock.—Construction.—Johnson Construction Co., capital stock \$25,000, incorporated; P. B. Hill, Pres.; V. C. Johnson, V.-P.; A. M. Lund, Secy.-Treas.

Fla., St. Petersburg.—Incinerator.—City votes Oct. 7 on \$20,000 bonds to build incinerator. M. W. Spencer, City Engr. (See "Miscellaneous Construction.")

Ky., Louisville.—Decorating.—Colonial Decorating Co., capital \$1000, incorporated by Chas. F. McDevitt, James E. Dunne and Wm. J. Connelly.

La., Lake Charles.—Grain Elevator.—Lake Charles Grain Co. will build grain elevator and feed mill.

La., Morgan City.—Navigation, etc.—Southern Navigation Co., capital \$50,000, incorporated; Thos. L. Morse, Pres.; Victor Von Scholer, V.-P.-Mgr.; Edward L. Kussman, Supt.; Chas. A. Bibbins, Secy.-Treas.

Md., Baltimore.—Paving Contracting.—American Paving & Contracting Co., capital stock \$75,000, incorporated by Stephen O'Connell, John T. Ward and John C. Strott; will acquire plant of Elder Paving & Contracting Co. at Montebello Ave. and Jenkins La. and continue operations, making specialty of sheet asphalt paving.

Miss., Pascagoula.—Marine Ways.—Navy Department, Washington, D. C., purchased site 200x400 ft. on Lowery Island on which to build marine ways to cost \$16,000.

Mo., Kansas City.—Blue Prints.—Western Blue Prints Co., capital \$10,000, incorporated by J. H. Wally, E. L. Wally and Wm. B. Yoder.

Mo., St. Louis.—Printing.—Federal Printing Co. incorporated by Levara Roland, Herbert Bumpass and William A. Lay; capital stock \$3000.

N. C., Creedmoore.—Publishing.—Creedmoore Publishing Co., capital stock \$25,000, organized by O. F. Crowson and others; has machinery.

N. C., Raleigh.—Publishing.—Carolina Farmer, authorized capital \$15,000, incorporated; J. M. Templeton, Pres.; W. G. Crowden, V.-P.; both of Cary, N. C.; C. A. Eury, Secy., Raleigh; will publish semi-monthly newspaper.

S. C., Darlington.—Construction.—Jefferson Construction Co., capital \$5000, incorporated by Charles Gibbons, M. W. Nicholson and A. S. Dargan.

Tenn., Knoxville.—Grain Elevator.—H. H. Hughes contemplates building grain elevator.

Tex., Corpus Christi.—Garbage Incinerator.

City voted \$20,000 bonds to purchase and install garbage incinerator. Roy Miller, Mayor. (Lately noted.)

Tex., El Paso—Copper Smelter.—El Paso Smelting Co. will, it is reported, install additional reverberatory furnace costing \$250,000.

Tex., Lufkin—Printing.—Watford Printing Co., capital stock \$6000, incorporated by J. H. Kurth, G. E. Watford and J. H. Gibson.

Tex., Waco—Engraving.—Star Engraving Co., Houston, will install branch plant.

Va., Roanoke—Taxicabs.—The Taxicab Corporation, maximum capital \$10,000, chartered; Victor Koehler, Pres.; Kirk Lunsford, V.-P.; John T. Taylor, Secy.-Treas.

Va., Chincoteague—Steamboat Line.—Merchants' Transportation Co., maximum capital \$10,000, incorporated with H. W. Conant, Pres.; E. B. Gilliss, Treas.; operate boat line between Chincoteague, Franklin City and Wisharts.

Va., Roanoke—Printing.—Square Deal Printing & Engraving Co., maximum capital \$15,000, incorporated; Thomas O'Connor, Pres.; F. G. Fraser, Secy.-Treas.

MISCELLANEOUS FACTORIES

Ala., Birmingham—Clothing.—Dundee Woolen Mills, capital stock \$2000, incorporated; Alexander Flower, Pres.; Samuel Flower, Treas.; Sidney E. Levy, Secy.

Ala., Gadsden—Shovels.—Southern Shovel Mfg. Co. will, it is rumored, reorganize and expend \$15,000 for improvements.

Ark., Camden—Creosote Oil, etc.—Dr. Geo. W. Kimball and associates will build two-story factory to manufacture various articles from fireproofing, creosote oil and carbon from coal.

Ark., Waldron—Creamery.—Waldron Creamery Co., capital \$6100, incorporated; F. J. Center, Pres.; R. L. Crutchfield, V.-P.; A. F. Lunter, Secy.; W. B. Piles, Treas.

D. C., Washington—Letter Boxes.—International Letter Box Co., maximum capital \$50,000, incorporated; Louis Garthe, Pres., 1407 W. St. N. W., Washington; Louis A. Spelsberg, V.-P., 1621 Frederick Ave., Baltimore, Md.; Ben M. Rawlings, Treas., Washington; Robert G. Harrison, Secy., Baltimore.

D. C., Washington—Wrenches, etc.—Kayro Wrench & Manufacturing Co., capital \$200,000, incorporated by M. F. Sheppard of Washington, M. E. Brown and J. M. Kienle of Wilmington, Del.

Fla., Tampa—Disinfectants, etc.—A. G. Maas and R. E. L. Youngblood (Killall Chemical Co.), Parish, Fla., contemplate establishing plant.

Fla., Tampa—Fire Apparatus, etc.—Haney Fire Apparatus Co., Edwin Olds, Mgr., 603 Citizens' Bank Bldg., advises that the company was incorporated with \$2,000,000 capital stock to manufacture outside fire elevators, automobile trucks and automobile pumps; will erect four buildings to cost about \$75,000. (Recently noted.)

Fla., Tarpon Springs—Bottling.—Cavouras Bros. will establish bottling plant; install machinery in building 56x66 ft.

Ga., Savannah—Files.—Perfection Index & File Co., capital stock \$100,000, incorporated by C. B. Stillwell, William B. Stillwell and others.

Ky., Frankfort—Silos.—Franklin County Silo Co., capital \$1000, incorporated by John T. Noel, Zach Church, L. C. Penn, O. B. Smithers and others.

Ky., Louisville—Fruit Products.—Humbly Fruit Products Co. increased capital stock from \$15,000 to \$100,000.

Ky., Louisville—Shock Absorbers.—Helical Shock Absorber Co., capital \$120,000, incorporated by Geo. L. Kannapel, M. C. Fullerlove and C. C. Heatt; manufacture shock absorbers for automobiles, etc.

Md., Baltimore—Special Preparations.—Cucumber Specialty Co., 203 W. Franklin St., leased 4-story building at 505 W. Lombard St. and will equip.

Md., Baltimore—Asphalt.—H. K. McCay, City Engr., will include in 1914 estimates a request for appropriation of \$20,000 for municipal asphalt plant for repairs (both bituminous and macadam, and sheet asphalt topping and binder); one-car plant contemplated; daily capacity 1000 sq. yds.

Md., Baltimore—Shirts.—Wiener & Feldman purchased 4-story brick building, 24x120 ft., at 611 E. Baltimore St., and will equip as shirt factory.

Miss., Vicksburg—Dye-Forma Aseptic Co., capital \$250,000, incorporated by Dr. Ernest C. Dye, Dr. W. H. Penn, Dr. Chas. J. Edwards and others.

Mo., Kansas City—Stamps, etc.—Allen Stamp, Seal & Manufacturing Co., capital stock \$12,000, incorporated by George Hansen, Edward Allen and Richard Henry.

Mo., St. Louis—Skirts.—Stylefit Skirt Co. increased capital stock from \$5000 to \$15,000.

Mo., St. Louis—Chemicals.—Monsanto Chemical Works increased capital stock from \$100,000 to \$250,000.

N. C., Charlotte—Bakery.—Salisbury Bakery, Arthur Peeler, Mgr., will establish bakery in Ford Hotel block; remodel building and install machinery.

N. C., Durham—Overalls.—Smith Mfg. Co. increased capital stock to \$50,000.

N. C., Lincolnton—Invalid Beds.—Wayco Manufacturing Co., authorized capital \$25,000, incorporated by C. W. Warlick, D. L. Yount, W. A. Costner and R. E. Costner.

N. C., Rural Hall—Seating.—Patterson-Kiser Seat Co., authorized capital \$300,000, incorporated by G. W. Patterson, Claude Kiser and W. L. Clement of Greensboro, N. C.

N. C., Wilmington—Medicine.—Quaker Laboratory Co., authorized capital \$10,000, incorporated by W. P. Edmondson, Robert Roseborough, G. A. Wilbur and C. H. Zihlin.

N. C., Wilmington—Maps, etc.—Southern Map Co., 511 Southern Bldg., incorporated; capital \$20,000; H. de W. Rapalje, Pres. and Treas.; J. A. Loughlin, V.-P.; O. C. Fillyaw, Secy.; continues established business; will install electric blueprinting machines; manufacture blueprints and other map reproductions; deal in drawing materials and surveying instruments.

Okla., Bromide—Lime.—Bromide White Lime Co. organized; J. A. Summer, Pres.; Louis L. Emery, Secy.-Treas.; erect 3 additional kilns, each 18x36 ft.; daily capacity 100 to 140 bbls.; cost of machinery \$7500. (Recently noted incorporated, \$15,000 capital stock.)

Okla., Dustin—Railway Joints.—O. O. Rossan Clickless Lock Railway Joint Co., capital stock \$50,000, incorporated by O. O. Rossan, L. T. Sheets and J. W. Smith.

S. C., Abbeville—Alarm Clock Attachment. Autolux Company, Chas. H. Cannon, Mgr., contemplates production of metallic attachment for alarm clocks, to have same manufactured by order. (See "Machinery Wanted.")

Tenn., Columbia—Cigars.—J. Donovan, South Haven, Mich., will, it is reported, establish cigar factory.

Tenn., Nashville—Bread.—American Bread Co. will build brick bakery at Gay and Fourth Ave.; cost \$20,000.

Tenn., Nashville—Automobile Wheel.—J. E. Fisher and T. M. Andrews contemplate establishing plant to manufacture patented automobile wheel; may incorporate company with \$50,000 capital stock.

Tenn., Paris—Perfumery.—American-French Perfumery Co. increased capital stock from \$50,000 to \$250,000.

Tex., Corsicana—Bakery.—McElwee & Wiedeman, owners Collin Street Bakery, will build brick addition to plant; install white enamel oven for baking fruit cake.

Tex., Madisonville—Bakery.—Crowson & Goods will build bakery.

Tex., Piedmont—Piedmont Manufacturing Co., capital stock \$35,000, incorporated by Walter Morgan, W. C. Mobley and J. D. Moody.

Va., Charlottesville—Creamery.—Albemarle Creamery Co. increased capital stock from \$10,000 to \$15,000.

Va., Portsmouth—Talcum Powder.—American Products Corporation, Box 98, maximum capital stock \$10,000, incorporated with Edward S. Mahoney, Pres.; C. A. Turner, Secy.-Treas.; manufacture talcum and other powders. (See "Machinery Wanted.")

Va., Richmond—Paper.—Standard Paper Manufacturing Co. purchased manufacturing plant of Richmond Paper Manufacturing Co.; former manufactures blotting paper and proposes enlarging plant to provide for equipment of Richmond company; latter will reincorporate as Richmond Paper Co. and conduct only wholesale and retail business.

Va., Richmond—Vinegar.—Richmond Vinegar Co., maximum capital stock \$15,000, incorporated with Harold S. Bloomberg, Pres.; Alvin B. Hutzler, Secy.; Fred F. Brazewell, Secy.-Treas.

W. Va., Charleston—Gas Valves.—Scott Automatic Valve Co., authorized capital \$25,000, incorporated by John R. Scott, Wm. A. Scott, Harry L. Riggs, A. B. Koontz and F. R. Hurlbutt.

W. Va., Fairmont—Artificial Limbs.—Troy Artificial Limb Co., capital stock \$25,000, in-

corporated by Troy E. Auvil, Chloe A. Auvil, G. V. Joliffe, Edward Slack and T. A. Deveny.

W. Va., Wheeling—Tobacco.—Bloch Bros. will repair machinery equipment.

W. Va., Wheeling—Bakery.—General Baking Co. will build addition; let contract to H. W. Fair.

MOTORS AND GARAGES

Ark., Pine Bluff—Automobiles.—Mann Motor Car Co., capital \$10,000, incorporated; J. H. Mann, Jr., Pres.-Treas.; J. H. Mann, Sr., V.-P., and W. D. Mann, Secy.

Md., Baltimore.—Board of Awards will remodel building for garage, storehouse and health department. (See "City and County.")

Md., Baltimore—Garage.—Consolidated Gas, Electric Light & Power Co., Lexington and Liberty Sts., has plans for garage to be built at West Arlington; 1 story; brick; 35x101 ft.

Miss., Pass Christian—Automobiles.—Union Auto Co., capital \$5000, incorporated by J. L. Jones, J. R. Williams and others.

Mo., Kansas City—Automobiles.—Thorp-Allyn Motor Co., capital stock \$10,000, incorporated by William R. Thorp, H. B. Thorp and H. L. Allen.

Okla., Oklahoma City—Hupmobile Sales Co., capital stock \$5000, incorporated by W. H. Say, L. S. Liggett and Harry Pole.

Tenn., Nashville—Garage.—Sobel Bros. will build brick garage; cost \$3000.

Tex., San Marcos—Automobiles.—Bradley-Moore Auto Co., Frank Bradley, Pres., opens proposals September 1 to erect two-story 70x80-ft. fireproof building costing about \$8000; closed contract for machinery costing \$8000. (Recently noted incorporated, capital stock \$6000.)

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ark., Heber Springs—Missouri & North Arkansas Railroad, E. M. Wise, Gen. Mgr., Eureka Springs, Ark., will construct roundhouse, etc. (See "Railway Stations.")

Tenn., Nashville.—Hunter McDonald, chief engineer Nashville, Chattanooga & St. Louis Railway, Nashville, states company will not build shops at Flat Rock recently reported.

ROAD AND STREET WORK

Ala., Anniston.—Calhoun County Commissioners contemplate expending \$50,000 annually for road improvements; will form 4 districts; county will undertake construction under supervision of W. E. Parker.

Ala., Birmingham.—Jefferson County Board of Revenue will build macadam road from Pinson to Blount county line, 8 miles.

Ala., Evergreen.—Conecuh County Commissioners will issue \$50,000 bonds for road construction; F. J. Dean, Probate Judge.

Ala., Gadsden.—City awarded tentative contract R. M. Hudson, Atlanta, Ga., to pave Walnut St. and Forest Ave. with bituminous concrete; cost about \$40,000; Charles L. Marsh, City Engr.

Ala., Oneonta.—Blount County Commissioners will construct road from Jefferson county line to Blountville by way of Cleveland, Ala.; will let contract Sept. 8.

Ala., Rockford.—Coosa county votes Oct. 6 on \$75,000 bonds to build and improve roads; also appropriated \$2000 for road near Goodwater and \$1200 for road near Rockford. Address County Commissioners.

Ark., Fayetteville.—City let contract Kaw Paving Co., Topeka, Kans., to pave public square and several streets; cost \$45,000.

Ark., Texarkana.—Miller County Commissioners let contract to George Henderson to grade and resurface Fulton Rd. from East 9th St. to Homan, Ark., 12 miles; width, 20 ft.; also build several bridges.

Fla., Bonifay.—Holmes county reported considering \$40,000 road bonds. Address County Commissioners.

Fla., Jacksonville.—City will pave additional streets; \$28,000 available. William S. Jordan, Mayor. (Various street paving contracts recently noted.)

Fla., Orlando.—City voted \$100,000 bonds for brick street paving; W. H. Reynolds, Mayor. (Recently noted.)

Fla., St. Augustine.—City will pave Bay St. with vitrified brick or macadam asphalt. Address The Mayor.

Fla., St. Petersburg.—City votes Oct. 7 on \$20,500 bonds for paving. M. W. Spencer, City Engr. (See "Miscellaneous Construction.")

Ga., Austell.—City votes August 27 on \$5000 bonds for street improvements. Address The Mayor.

Ga., Cartersville.—City voted \$15,000 bonds to improve streets; G. W. Young, Mayor. (Recently mentioned.)

Ga., Moultrie.—Colquitt county will vote on \$400,000 bonds to build roads. Address County Commissioners.

Ky., Greenville.—City will open bids about September 1 for grading and rebuilding about two miles macadam streets recently noted; B. G. Rice, engineer in charge.

Ky., Lexington.—City awarded contract to Carey-Reed Company, Lexington, to pave portions of Patterson, S. Spring, Cedar, Jefferson, W. 4th, 2d, Water and E. Short Sts. with asphalt and vitrified brick on concrete foundation. (Call for bids lately noted.)

Ky., Louisville.—City will reconstruct Market St. from 3d to 5th St. and 4th St. from Main to Market St. with wood blocks; cost \$21,000; Board of Public Works receives bids until Sept. 4.

Ky., Maysville.—City awarded contract to J. E. Reed to construct concrete sidewalks.

La., Alexandria.—City voted \$14,000 bonds for street paving and drainage. Address The Mayor. (Recently noted.)

La., Shreveport.—City will pave 30-ft. alley, about 2500 sq. yds.; receives bids until Sept. 8; L. H. Baker, Secy.-Treas. (See "Machinery Wanted.")

Md., Baltimore.—City awarded contract to David M. Andrew Co., Mt. Vernon Ave. and 36th St., Baltimore, at \$51,513.50 to pave with granite blocks Fallway from Madison St. to 150 ft. south of Center St.; H. K. McCay, City Engr. (Call for bids lately noted.)

Md., Baltimore.—States Roads Commission, William L. Marcy, Secy., 601 Garrett Bldg., will construct 3 sections State highway, 4.6 miles, and bridge; Prince George's county, reinforced concrete bridge across Eastern Run; Harford county, between Grafton Shops and Jarroville, 1 mile (macadam or gravel); Caroline county, between Dover bridge and Linchester, 1.5 miles, and between Denton and Federalburg, 1.5 miles. Bids received until Sept. 19. (See "Machinery Wanted.")

Md., Baltimore.—City invites bids (recent bids rejected) until September 3 for grading, curbing and paving East Falls Ave. from Stiles St. to Aliceanna St., Eastern Ave. from East Falls Ave. to Broadway and two driveways into sewerage pumping station; Contract No. 61; sheet asphalt, 1,550 sq. yds.; vitrified block, 2330 sq. yds. and granite block, 3050 sq. yds.; R. Keith Compton, chairman Paving Commission. (See "Machinery Wanted.")

Miss., Waynesboro.—Wayne County Supervisors ordered \$100,000 bond issue for road construction.

Md., Cumberland.—Road Directors, Allegany County, Clinton Uhl, chairman, will construct road between Midland and Lonaconing, Md., distance of .71 mile; bids received until August 30; blank forms, proposals, etc., furnished on application State Roads Commission, Garrett Bldg., Baltimore. (See "Machinery Wanted.")

Md., Denton.—Caroline County Commissioners will expend \$25,000 on road construction.

Md., Havre de Grace.—Street Commission awarded contract at \$426.09 for resurfacing streets.

Md., Towson.—Baltimore County Commissioners, E. Stanton Bosley, Secy., will construct portion State-aid highway along old Court Rd. between Falls Rd. and Green Spring Ave., distance .72 mile; bids received until September 11. (See "Machinery Wanted.")

Miss., Collins.—Supervisors District No. 1, O. W. Conner, Pres., let contract A. P. Ewell Bros., Birmingham, Ala., to gravel 37 miles roads; Xavier A. Kramer, Engr., Magnolia, Miss.

Mo., Marshall.—City awarded contract to J. M. Black, Nevada, Mo., to construct 13,000 sq. yds. dalarway pavement.

Mo., Maryville.—Polk township of Nodaway county voted \$50,000 road construction bonds. Address County Commissioners.

N. C., Charlotte.—Executive Board will invite bids for sheet asphalt and concrete street paving; cost \$60,000; Joseph Firth, City Engr.; works consists 42,452 sq. yds. paving and 11,688 sq. yds. cement sidewalks; bids received until Sept. 3; material, bitulithic, sheet asphalt and asphaltic concrete; A. H. Wearn, Clerk. (See "Machinery Wanted.")

Okla., Okmulgee.—City will construct pavement in District No. 5; 1456 cu. yds. earth

excavation, 6832 sq. yds. asphalt paving, 808 sq. yds. brick paving in car tracks, 2880 lin. ft. curb and gutter, 251 lin. ft. armored curb and gutter, 1600 sq. ft. concrete crossings removed, 254 lin. ft. 3x10-in. oak headers and 40 lin. ft. water services; receives bids until Sept. 1; R. H. Janness, Commissioner of Finance. (See "Machinery Wanted.")

Tenn., Knoxville.—City contemplates \$20,000 bond issue to grade, curb, gutter and pave streets in Improvement Districts Nos. 93, 98 and 100. Address The Mayor.

Tex., Angleton.—Brazoria county, district No. 2, voted \$150,000 bonds to construct roads. Address County Commissioners.

Tex., Angleton.—Brazoria county votes August 28 on \$75,000 bonds for road construction. Address County Commissioners.

Tex., Annhuac.—Road District No. 4 of Chambers county issued \$100,000 bonds for road construction. Address County Commrs.

Tex., Eastland.—Eastland County Commissioners appropriated \$3000 for road construction; Cisco, Tex., will appropriate \$3000 additional for further construction.

Tex., Childress.—City defeated \$15,000 street and sewer bonds. Address The Mayor. (Lately noted.)

Tex., Denison.—City let contract Murphy-Moulton Co. at \$50,499.50 to pave 14 blocks on Gandy St.

Tex., Georgetown.—District No. 2 of Williamson county voted \$50,000 bonds for road construction. Address County Commrs.

Tex., Groveton.—Precinct No. 2 of Trinity county votes Sept. 16 on \$100,000 bonds for road construction. Address County Commrs. (Lately noted.)

Tex., Seadrift.—City voted bonds to grade, shell and otherwise improve streets. Address The Mayor.

Tex., Sherman.—City let contract Levy & Levy and Bert Hahn Construction Co. to pave West Pecan, West Mulberry, North Elm, Wall and East Lamar Sts. from Travis to Throckmorton St.

Tex., Woodboro.—Precinct No. 2 of Refugio county voted \$25,000 bonds for road construction. Address Precinct Commissioners.

Va., Charlottesville.—Highways Committee of Chamber of Commerce will petition city for \$20,000 bonds to improve roads in Charlottesville District; stated county will contribute same amount.

Va., Danville.—City will construct granite block, brick and concrete sidewalk by city force; cost \$30,000; J. O. Magruder, City Engr. (Recently noted.)

Va., Fredericksburg.—City Council appropriated fund to improve road from Fredericksburg to Falmouth Bridge, on proposed Washington-Richmond Highway; 18-ft. roadbed and three-quarters mile long; water-bound gravel; Automobile Association appropriated \$1050; construction under supervision R. Stuart Royer, City Commissioner.

Va., Richmond.—Board of Aldermen appropriated \$4000 to pave with granite spalls portion of Lombardy St. Charles E. Bolling, City Engr.

Va., Richmond.—Henrico and Charles City County Supervisors will improve 2 miles of New Market Rd.; cost \$2500; let contract William Wood.

Va., Virginia Beach.—Town contemplates street paving; B. P. Holland, Mayor.

W. Va., Masontown.—City is having surveys made for grading and paving streets; considering sewer and water-works construction; G. B. Hartley of Monongahela Valley Engineering Co., Morgantown, W. Va., in charge.

W. Va., McMechen.—McCullagh & Reid awarded contract to William P. Daniel, Warwood, W. Va., to construct 40,000 to 50,000 sq. ft. cement sidewalks and about 8000 lin. ft. concrete curbing; has contract for cement, sand and gravel.

W. Va., Wheeling.—Baltimore & Ohio Railroad, F. L. Stuart, Ch. Engr., Baltimore, Md., will improve South St.; cost \$7000; Charles Cook, City Engr., will invite bids.

SEWER CONSTRUCTION

Ala., Clanton.—City will vote on \$40,000 bonds for sewer and water-works construction; E. A. Matthews, Mayor. (Lately noted.)

Ga., Austell.—City votes August 27 on \$8000 bonds for sewer construction. Address The Mayor. (Recently mentioned.)

Ga., Cartersville.—City voted \$75,000 bonds to construct sewer and drainage system. G. W. Young, Mayor. (Recently mentioned.)

La., Alexandria.—City voted \$22,000 bonds

to extend and improve sewer system. Address The Mayor. (Recently mentioned.)

La., New Orleans.—City let contract Hampton Reynolds at \$86,400 to extend drainage pumping station No. 1.

La., Shreveport.—Geo. R. Wilson, City Engr., submitted report estimating cost of extending sanitary sewer system throughout western and southern suburban sections at \$200,000; include purification plant to cost \$60,000 and 25 miles sewers.

Mo., St. Louis.—City, C. A. Moreno, Sewer Commissioner, opens bids September 12 to construct third section of Glaise Creek joint district sewer; brick, 10 ft. to 5 ft. inside diameter; length 734 ft.; estimated cost \$162,000; recently noted. (See "Machinery Wanted.")

Mo., St. Louis.—City, C. A. Moreno, Sewer Commissioner, opens bids September 5 to construct second section of Glaise Creek joint district sewer; reinforced concrete, 16 ft. x 11 ft. 7 in. to 12 ft. x 8 ft. 6 in. inside dimensions; 3659 ft. in length; estimated cost \$180,000; recently noted. (See "Machinery Wanted.")

N. C., Charlotte.—City will construct 8400 ft. 8-in. sewer, with necessary manholes and flush tanks; bids received until Aug. 27 by Executive Board of city; A. H. Wearn, City Clerk; Joseph Firth, City Engr.; previously noted to receive bids until July 30 for 13.6 miles main and lateral sewers. (See "Machinery Wanted.")

N. C., Elkin.—City voted \$30,000 bonds for sewer system and water-works; C. G. Armfield, Mayor. (Recently noted.)

Okla., Coalgate.—City will construct sanitary sewer; total length 9105 lin. ft.; straight 8-in. and 15-in. pipe; 5963 cu. yds. earth excavation; 336 cu. yds. rock excavation; 19 manholes; 2 lampholes; number of yds., 146; voted \$35,000 sewer-extension bonds; bids received until Aug. 27; Asa school room, swimming pool, bowling alley, etc.; cost \$60,000.

S. C., Winnsboro.—Town considering construction of sewer system and water-works; surveys made. Address Town Clerk.

Tenn., Nashville.—City will construct sewer in Belmont Heights district from Belmont St. to Portland Ave. and Belmont Blvd.; 2200 ft.; sewer to be brick, 48, 42, 39, 36 and 30-in. pipe; \$16,000 appropriated; Board of Public Works receive bids until Aug. 28.

Tex., Childress.—City defeated \$15,000 sewer and street bonds. Address The Mayor. (Lately noted.)

Tex., Wharton.—City votes Sept. 24 on \$15,000 bonds to extend sewer system. Address The Mayor. (Lately noted.)

Va., Galax.—Town voted \$11,000 bonds for sewer system; D. A. Robertson, Mayor. (Recently noted.)

Va., Roanoke.—Sewer Committee recommended bid of C. Markley for constructing sewers; cost about \$4500.

Va., Virginia Beach.—Town contemplates improving sewer system; B. P. Holland, Mayor.

W. Va., Huntington.—Board of Commissioners will construct sewers in portions of 14th and Jefferson Sts. and several alleys aggregating 7021 lin. ft. 12-in., 580 lin. ft. 10-in., 1080 lin. ft. 24-in. and 496 lin. ft. 18-in. tile sewers; bids received until Sept. 5; A. P. Maupin, City Engr. (See "Machinery Wanted.")

W. Va., Masontown.—City is considering sewer construction; G. B. Hartley, engineer, Morgantown, W. Va. (See "Road and Street Work.")

TELEPHONE SYSTEMS

Ala., Birmingham.—Southern Bell Telephone & Telegraph Co. (main office, Atlanta, Ga.) contemplates expending \$87,000 to improve and extend telephone system in Birmingham district; consolidate Woodlawn and East Lake exchanges and build new exchange; latter contract let to Evans Bros. Construction Co.; underground and aerial facilities to cost \$39,759; leased offices in West End and will install central office equipment costing \$15,000.

Ky., Somerset.—Somerset & Mintonville Telephone Co., incorporated by W. H. Waddle, Oscar Girdler, C. H. Fisher, Logan Denton and Gahala Wesley.

S. C., Hampton.—Citizens' Telephone Co., capital \$10,000, incorporated by W. A. McDaniel, Geo. Warren and J. W. Vincent.

Tex., Laverna.—Mutual Telephone Co., capital stock \$2000, incorporated by Hugo Kott, W. M. Wiseman and W. E. Warren.

TEXTILE MILLS

Md., Frostburg.—Hosliery.—Western Maryland Laundry Co. will make repairs to build-

ing occupied by Parker Hosliery Co. (Lately noted as partially burned.)

N. C., Zebulon.—Cotton Goods.—B. H. Richardson is interested in plan to form \$100,000 company to build cotton mill.

Tenn., Dayton.—Hosliery.—Dayton Hosliery Mills engaged C. E. Bearden of Chattanooga, Tenn., to furnish plans and specifications for construction of buildings for plant. (Recently reported incorporated with \$60,000 capital stock.)

N. C., Selma.—Cotton Yarn.—Ethel Cotton Mills will add 3000 spindles; for this addition will order spindles, maple flooring, pulleys, shafting and belting. (See "Machinery Wanted.")

WATER-POWER DEVELOPMENTS

N. C., Old Fort.—Wm. Robinson purchased water-power site on Curtis Creek, 2 miles from Old Fort; contemplates development.

Tenn., Tullahoma.—Tennessee Utilities Co., capital stock \$25,000, incorporated with G. M. Whitson, Prest., and L. E. Womack, Secy.; plans to build hydro-electric plant developing 20,000 H. P. on Elk River, in Franklin county.

WATER-WORKS

Ala., Clanton.—City will vote on \$40,000 bonds for water-works and sewer construction; E. A. Matthews, Mayor. (Lately noted.)

Ark., Prairie Grove.—City contemplates constructing water and electric-light plant to cost \$50,000. Address The Mayor.

Fla., Jacksonville.—City will install pumping engine; W. M. Boswick, Jr., chairman trustees water-works and improvement bonds, will ask bids to furnish and erect on foundation provided by city horizontal cross-compound or triple-expansion condensing pumping engine to have capacity 12,000,000 gals. in 24 hours against total dynamic head 170 ft.; as alternative proposition prices requested for engine of same general design having capacity 15,000,000 gals. in 24 hours; E. L. Carroll, Supt. Water-works, Engineer Bldg.

Fla., Lakeland.—Lakeland Dairy Farm contemplates installing water supply system. Address A. J. MacDonough. (See "Machinery Wanted.")

Fla., St. Petersburg.—City votes Oct. 7 on \$41,000 bond issue to extend and improve water-works; M. W. Spencer, City Engr.; city recently noted as receiving bids until Sept. 2 to build 80,000-gal. water tank, etc. (See "Miscellaneous Construction.")

Ga., Austell.—City votes August 27 on \$12,000 bonds for water-works. Address The Mayor. (Recently mentioned.)

Ga., Cartersville.—City voted \$20,000 bonds to extend water and fire-protection system. G. W. Young, Mayor. (Recently mentioned.)

La., Alexandria.—City voted \$4000 bonds to extend and enlarge water system; let contract New Orleans Well Drilling Co., New Orleans, at \$5125.50 to drill artesian well furnishing not less than 100,000 gals. Address Mayor Whittington. (Lately noted.)

La., New Orleans.—City let contract C. Hyland & Co. at \$4556.70 to construct underground conduit to river; also let contracts for sluice gates and traveling crane.

Mo., St. Louis.—City contemplates installing equipment to sterilize water with liquid chlorine instead of hypo-chlorite of lime; will install 2 machines to sterilize 100,000,000 to 125,000,000 gals. water daily.

N. C., Elkin.—City voted \$30,000 bonds for water-works and sewer system; C. G. Armfield, Mayor. (Recently noted.)

N. C., Raleigh.—R. B. Seawell, Commissioner of Public Works, advises that J. A. Gaboury & Son, Jacksonville, Ala., received contract to construct impounding reservoir recently described; cost about \$15,000. (Previously noted otherwise awarded.)

N. C., Goldsboro.—City will construct concrete reservoir; 1,500,000 gals. capacity; reinforced concrete cover; 2500 cu. yds. excavation, 300 cu. yds. plain concrete and 90 cu. yds. reinforced concrete; bids received until Sept. 9; John R. Higgins, Mayor; Gilbert C. White, engineer, Charlotte, N. C. (See "Machinery Wanted.")

N. C., Whiteville.—Town Commissioners considering plans suggested by J. B. McCrary Company, Atlanta, Ga., for water-works and electric-light system.

S. C., Newberry.—City votes Sept. 1 on \$30,000 bonds to purchase water-works and electric-light plant, under construction by J. B. McCrary Co., Atlanta, Ga.

S. C., Winnsboro.—Town considering construction of water-works and sewer system;

estimated cost \$65,000; surveys made. Address Town Clerk.

Tenn., Columbia.—City votes Sept. 11 on \$100,000 water-works bonds. (These bonds recently noted as for purchase of water-works from Columbia Water & Light Co.)

Tenn., Maryville.—Samuel Everett, Mayor, states city proposes to install water-works and desires correspondence relative to same. Recently noted as granting franchise. (See "Machinery Wanted.")

Tex., Archer City.—City will construct water-works. Address The Mayor.

Tex., Belton.—City will construct surfaced concrete reservoir or pumping basin, 40x15x30 ft. (excavation by city); brick and concrete pump-house, 61x27½ ft.; lay 15,500 ft. 4-in. water mains, etc.; C. E. Leonard, Engineer; bids received until Sept. 1; previously noted. (See "Machinery Wanted.")

Tex., Corpus Christi.—City contemplates constructing 20-in. water main from Calallen pumping station to city; estimated cost \$100,000; H. A. Stevens, City Engr.

Tex., Huntsville.—City voted \$8500 bonds to extend water system. Address The Mayor.

Tex., Navasota.—City granted franchise to Randall-Lovegrove-Wyman, Union National Bank Bldg., Houston, Tex., for water-works; will take over present municipal plant and extend, improve and operate same.

Tex., Somerville.—City contemplates issuing bonds for water-works. Address The Mayor.

Tex., Weatherford.—City of Weatherford Water, Light & Ice Co. increased capital stock from \$80,000 to \$90,000.

Va., Harrisonburg.—A. R. Rosenberger, 408 First National Bank Bldg., is interested in proposed installation of filtration plant. (See "Machinery Wanted.")

W. Va., Charleston.—West Virginia Water & Electric Co. applied for municipal franchise to construct water-works, including reservoirs, pump-house, etc.

W. Va., Masontown.—City is considering water-works construction; G. B. Hartley, engineer, Morgantown, W. Va. (See "Road and Street Work.")

WOODWORKING PLANTS

Ala., Talladega.—Heading and Staves.—Company is being organized, \$15,000 capital stock, by George B. Burton, Roland G. Spearman, H. L. McEldey and L. S. Pace; to operate stave and heading mill; machinery purchased.

Ark., Argenta.—Stave.—W. W. Wilson & Wrape Stave Co., W. B. Wrape, Gen. Mgr., will enlarge plant and install additional machinery.

Ark., Heber Springs.—Staves.—Sutton Stave Co., capital stock \$10,000, incorporated; George H. Welch, Prest.; John W. Welch, V.-P.; S. G. Sutton, Secy.-Treas.

Ark., Stuttgart.—Heading.—Kennedy Heading Co., Memphis, Tenn., will establish branch plant; manufacture rough and square heading, to be finished at Memphis plant.

Ga., Dublin.—Handles, etc.—Y. W. Williams and N. A. Alexander will establish plant to manufacture handles, wheels and spokes.

Ky., Louisville.—Church Furniture and Seating.—Lausberg & Macke, 970 Underhill St., opens proposals Sept. 15 to erect 20x35-ft. and 6x55-ft. mill-construction buildings; cost \$5000; plans by owners; install woodworking machinery (purchased) costing \$3000.

La., Lottio.—Excelsior, etc.—Lovert Lumber & Shingle Co. contemplates installing machinery to manufacture excelsior and wood wool. (See "Machinery Wanted.")

La., Monroe.—Staves.—Brown Stave Co. will build plant, to cost \$25,000.

Miss., Crystal Springs.—Boxes and Crates. Mississippi Manufacturing Co. increased capital stock from \$50,000 to \$100,000.

Mo., St. Louis.—Buggies.—Banner Buggy Co. practically completed addition to plant; consists of 2 buildings, 24x130 ft. and 15x55 ft., respectively; drykiln, 28x76 ft.; brick and steel; cost \$42,000; contract awarded to Missouri Specialty Co., St. Louis; J. S. Hunt, engineer in charge; cost of machinery (purchased) \$30,000; daily capacity 250 sets gear woods, 250 bodies complete and 250 parts shafts and poles. (Lately noted.)

N. C., Cotton Grove, P. O. at Winston-Salem.—Chair Stock.—Miller Lumber & Manufacturing Co., capital stock \$125,000, incorporated to manufacture timber into chair stock; output to be taken by Forsyth Manufacturing Co.; J. L. Miller, Prest.-Treas.-Mgr.; Leroy Mill, Secy.; both of Cotton Grove; R. A. Spough, V.-P., Winston-Salem.

Tenn., Grapevine.—Staves.—Hunt & Ferguson of Jasper, Tenn., secured 3500 acres

white oak timber and will manufacture into staves; have removed 40 H. P. boiler, engine and machinery from Jasper to timber properties.

Tex., Beaumont.—Boxes and Crates.—Sam J. Smith, Rusk, Tex., will establish plant to manufacture wooden boxes and crates; cost \$25,000. (Recently noted.)

Tex., Beaumont.—Boxes, etc.—Beaumont Box Manufacturing Co., Samuel J. Smith, Gen. Mgr., is erecting box and crate factory; ironclad building; machinery mainly purchased. (Recently noted as to establish \$25,000 factory.)

BURNED

Ala., Ashford.—Three buildings owned by W. H. Robertson; loss \$5000.

Ala., Prentice.—King Lumber Co.'s 3 dry-kilns; loss \$10,000.

Ark., Camden.—Wick Smith's residence; loss \$5000.

Ark., Cushman.—Dennison Shell Co.'s warehouse; loss \$10,000.

Fla., Lake Butler.—R. J. Andrews' residence; loss \$35,000.

Ga., Collins.—W. J. Wrenn's residence on Main St.

Ga., Macon.—Buckeye Cotton Oil Mill Co.'s hull and meal house; loss about \$10,000.

Ga., Savannah.—Phosphate Mining Co.'s plant damaged at loss of \$3000, not \$20,000, as recently stated; repairs being made.

Ga., Union City.—Reid Hotel; loss \$4500.

Ky., Danville.—Allen S. Edelen's stock barn, loss \$12,000; W. T. May's residence, loss \$5000.

Ky., Dekoven.—Store building of Union Supply Co., owned by Ohio Valley Coal & Mining Co.; loss \$30,000.

La., Baton Rouge.—S. Steib's residence; loss \$10,000.

La., New Orleans.—Crystal Theater, South Broad St. and Cleveland Ave.

Md., Arlington.—Branch of Baltimore Post-office.—M. Gutthoff's residence at Reisterstown Rd. and Academy Ave.; loss \$3000.

Md., Centerville.—Dwelling, granary and other buildings owned by Mrs. W. Parrott Sparks, Church Hill, Md.; loss \$5000.

Md., Frostburg.—Parker Hosiery Mill Co.'s plant partially burned; estimated loss \$5000; main office, Portsmouth, Va.; building owned by Western Maryland Laundry Co.

Mo., St. Louis.—Coyne Automobile Co.'s building at 902 Cass Ave.; loss \$40,000.

Okla., Altus.—Mayor Cage Beach's residence.

Okla., Sallisaw.—Residence of C. H. Orendorff and J. H. Standridge; loss \$6000.

S. C., Chester.—Will T. Wood's residence on Reedy St.

Tenn., Elora.—School building; loss \$5000. Address The Mayor.

Tenn., Chattanooga.—John W. Chandler's residence, 5010 Sunnyside Park, St. Elmo; loss \$3500.

Tex., Canton.—John S. Thorn's gin.

Tex., Dallas.—Knapply Bldg., owned by Knapply estate, occupied by Draughton Business College; Boston Dairy Lunch and Confectionery; loss about \$15,000.

Tex., Longview.—Albert Morgan's residence; loss \$3000.

Tex., Longview.—William Rosson's residence on Green St.; loss \$5000.

Tex., Mexia.—Lillo S. Munger's residence; loss \$7000.

Tex., Sherman.—Building 295-295 N. Travis St., owned by W. C. Eubanks; loss \$24,900.

Tex., Taylor.—Warehouses of Swift & Co., Prewitt Hardware Co., Richter Furniture Co. and Hochs Hardware Co.; loss \$190,000.

Va., Phoebus.—Phoebus Foundry Co.'s pattern plant; loss \$4000.

plans by Nolan & Torre, 415 Hennen Bldg., New Orleans, for lodge and store. (See "Stores.")

La., New Orleans.—Woodmen of the World Home Association will erect brick addition and remodel building on St. Charles St.; cost \$7500.

Miss., Meridian.—Ancient Free and Accepted Scottish Rite Masons will expend \$50,000 to erect Scottish Rite temple; 112x110 ft.; ordinary construction; steam heat; gravel roof; plans by P. J. Krouse, Meridian, to whom proposals may be addressed. (Recently noted to receive bids until Sept. 2.)

Mo., Oregon.—Independent Order of Odd Fellows, D. M. Martin, Secy., will open bids Aug. 30 for 3-story-and-basement auditorium and lodge building; cost \$20,000.

Mo., St. Joseph.—Young Women's Christian Association opens bids September 4 to erect building; 145x93 ft.; fireproof; steam heat; electric lighting; automatic elevator; tar and gravel roof; cost \$100,000; plans by Walter Boschen, Tootle Block, St. Louis. (Recently noted.)

N. C., Asheville.—Knights of Pythias, Pisgah Lodge, E. H. Miller, chairman Building Committee, will erect lodge building.

N. C., Asheville.—Elks Home Co. (E. R. Hewitt, S. Sternberg and E. B. Campbell, directors) will erect lodge and store at Haywood and Walnut Sts.; 4 stories; fireproof; cost \$50,000.

Okla., Tulsa.—Fraternal Order of Eagles, Aerie 1183, will erect lodge.

Tenn., London.—Ancient Free and Accepted Order of Masons has plans by Baumann Bros., Knoxville, for lodge building.

Tex., Corsicana.—Young Men's Christian Association will open bids Sept. 19 to erect three-story fireproof reinforced concrete building, 55x110 ft.; plans at office of H. O. Blanding, architect; certified check \$1500.

Tex., Waxahachie.—Benevolent Protective Order of Elks is having plans prepared for home; 2 stories; cost \$25,000.

BANK AND OFFICE

Ark., Little Rock.—City Market & Arcade Co., Fred W. Allsopp, Secy., receives bids until Sept. 15 to erect arcade, office building, etc. (See "Miscellaneous.")

Fla., West Palm Beach.—West Palm Beach Board of Trade will erect office building.

Ga., Macon.—Atlantic National Fire Insurance Co., John J. McKay, Gen. Mgr., has plans by F. R. Hupp, Macon, for office building; 27½x75 ft.; ordinary construction. (Recently noted to cost \$25,000.)

Miss., Laurel.—General Service Corporation will erect office building.

Mo., Kansas City.—South Side Investment Co. will erect building for offices and stores. (See "Stores.")

Mo., St. Louis.—Grand Amusement Co. will erect building for offices and skating rink. (See "Miscellaneous.")

Va., Honaker.—First National Bank, E. J. Boyd, chairman directors, receives bids until August 30 to erect two-story-and-basement bank building; plans may be had from Mr. Boyd on deposit of \$25; certified check, \$250.

W. Va., Williamson.—First National Bank will erect addition to building; cost \$20,000.

CHURCHES

Ala., Goodwater.—Methodist church will erect brick building; cost \$6000.

D. C., Washington.—Methodist Protestant church, Park Rd. and New Hampshire Ave., has plans by Spieden & Spieden, 1403 New York Ave. N. W., for building to replace present one; 50x55 ft.; seating capacity 300; brick, with front of Port Deposit granite and Indiana limestone; Gothic architecture; slate roof; beamed ceiling, dome-shaped; fireproof to first floor; hot-water heat; electric lighting; slate roof; cost \$20,000; W. T. Ballard, chairman building committee, 1425 New York Ave.; bids being considered.

Fla., Zephyrhills.—Methodist church will erect building. Address The Pastor, Methodist Church.

Ga., Atlanta.—Central Baptist Church has plans for building; auditorium, Sunday-school room, swimming pool, bowling alley, etc.; cost \$60,000.

Ga., Atlanta.—Methodist Episcopal Church, Rev. E. H. Oliver, pastor, has plans by A. F. N. Everett, Atlanta, for building; 62x88 ft.; ordinary construction; slate roof; cost \$15,000; bids opened; proposals may be addressed to S. Cunningham, 11½ S. Broad St. (Recently noted.)

Ga., Dalton.—First Methodist Church has

plans to erect annex to Sunday-school, including kitchen and dining-room; steam heat; cost \$6000. Address The Pastor, First Methodist Church. (Previously noted.)

Ga., Dalton.—First Presbyterian Church has plans for remodeling building and erecting Sunday-school annex; cost \$11,000. Address The Pastor, First Presbyterian Church.

Ky., Louisville.—Deer Park Baptist Church incorporated by C. R. Tucker, William P. Hall and others; will erect building.

Ky., Louisville.—German Evangelical church will erect addition to building at 1722 Prentiss St.; brick; cost \$3000. Address The Pastor, German Evangelical Church.

Mo., St. Louis.—Third Baptist Church, Rev. Dr. W. J. Williamson, pastor, contemplates enlarging building.

Mo., St. Louis.—Rev. J. J. Glennon will erect 1-story church 80½ Woodland St.; cost \$4000.

N. C., Asheville.—First Congregational Church will organize and erect building. J. W. Dunn is interested.

S. C., Greenville.—Tabernacle Baptist Church will erect building; brick veneer; 1 story and basement; cost \$3500. Address The Pastor, Tabernacle Baptist Church.

Tex., Dublin.—Trinity Baptist Church contemplates erecting building in East Dublin; 30x50 ft.; C. H. Whitten, A. S. Wise and others, trustees.

Tex., Houston.—Magnolia Park Baptist Church opens bids Sept. 2 to erect church; plans, specifications, etc., at office of F. W. Caulkins, 701 Magnolia Ave.; D. C. Davison, chairman building committee. (Lately noted.)

Va., Alexandria.—St. Rita's Catholic Church at Mount Ida has plans for building. Address The Pastor, St. Rita's Catholic Church.

Va., Richmond.—Fairmount Avenue Methodist Church, Rev. E. V. Carson, pastor, has plans for building on Fairmount Ave.; Gothic architecture; three towers; two stories; seating capacity 500; cost \$15,000. (Previously noted.)

W. Va., Wheeling.—Edgewood Evangelical Church will erect building; John M. Gibson, John J. Brockhardt and others, trustees.

CITY AND COUNTY

Ala., Birmingham.—Auditorium.—City will vote September 15 on \$200,000 bond issue for auditorium; Culpeper Exum, Pres. City Commissioners. (Lately noted.)

Ala., Carrollton.—Jail.—Picksens County Commissioners, L. C. Hudgins, Chmn., open bids Sept. 8 to erect jail; proposals will be received for jail complete and different work separately; certified check, \$500; plans and specifications at office of Harry B. Wheelock, architect, Birmingham, and at Probate office, Carrollton. (Lately noted.)

Fla., Gulfport.—City Hall and Jail.—City Council authorized S. J. Webb, City Clerk, to advertise for bids for city hall and jail building; city hall portion, frame; jail, brick; fireproof; vault, etc.

Fla., St. Petersburg.—Women's Building.—City will vote Oct. 7 on \$7400 bonds to erect women's building. Address The Mayor. (See "Miscellaneous Construction.")

La., New Orleans.—Engine-house and Police Station.—City will erect combination engine-house and police station at Terpsichore and Annunciation Sts. Address The Mayor.

Md., Baltimore.—Dwelling.—Board of Awards, City Hall, opens bids September 3 to erect home for superintendent of Sydenham Hospital at Bayview; drawings, etc., on file at office of C. E. Stubbs, Inspector of buildings; certified check, \$500.

Md., Baltimore.—Health Department, etc.—Board of Estimates, City Hall Annex, authorized Building Inspector Clarence E. Stubbs, 16-21 City Hall, to have plans prepared for remodeling old Polytechnic Institute on Courtland St. into quarters for health department, municipal storeroom and garage; estimated cost \$10,000.

Md., Ocean City.—City Hall.—City, Ralph L. Goff, City Engr., will erect city hall; cost about \$100,000.

Miss., Jackson.—Library.—City will erect Carnegie library. Address The Mayor.

N. C., Raleigh.—Hospital.—John A. Mills, Chmn. Commissioners of Wake County, receives bids until Sept. 1 to erect County Hospital; plans and specifications at office of C. E. Hartge, architect; bids addressed to Mr. Hartge. (Lately noted.)

Tenn., Memphis.—Hospital.—City, R. A. Utley, acting Mayor, opened bids to erect hospital for babies; John H. Hughes is lowest bidder at \$10,054; eight rooms, exclusive of examination rooms, kitchen, hall, etc.;

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ark., Little Rock.—City Market & Arcade Co., Fred W. Allsopp, Secy., receives bids until Sept. 15 to erect arcade, apartment-house, etc. (See "Miscellaneous.")

D. C., Washington.—Harry Wardman, K St. near 15th St. N. W., and Thomas P. Bones, 1342 New York Ave. N. W., will erect apartment-house on R St.

Fla., Tampa.—Dr. S. L. Lowry has plans by Bonfoey & Elliott, Tampa, for apartment-house on Verne St.; 90x128 ft.; 4 apartments of 5 rooms each; stucco; metal cornices; cost \$8500.

Ga., Savannah.—Rosa L. Barnes will erect frame apartment-house on 40th St.; cost \$4000.

Ga., Savannah.—A. J. Oliver will erect apartment-house on E. 38th St.; 2 stories; frame.

Md., Baltimore.—J. Wm. Kempel, 5013 Liberty Rd., has plans by Herbert G. Jory, Munsey Bldg., Baltimore, for apartment-house at 4017 Liberty Rd.; 3 stories; frame; 35x36 ft.; steam heat; gas and electric lighting; slate roof; cost \$8000; construction by owner.

Md., Hagerstown.—Maryland Real Estate Co., capital stock \$50,000, incorporated by Harry S. Meyers, Nevil J. Brandt, Christian M. Horst and others; purchased Trinity Lutheran Church property and will convert into apartment-house and store.

Mo., Kansas City.—H. A. Bailey has plans by Otis Goddard, Reliance Bldg., for apartment-house at 1112-22 E. 9th St.; 40 apartments; brick, stone and steel; cost \$125,000.

Mo., St. Louis.—George Jackson will erect apartment-house at 3922 Louisiana St.; 2 stories; cost \$5300.

Mo., St. Louis.—M. Hoffmann will repair apartment-house 4217-19 W. Belle St.; cost \$2500.

Mo., St. Louis.—W. C. Bosquit will erect apartment-house 3909-11 Wyoming St.; 2 stories; cost \$5500.

Mo., St. Louis.—V. A. Chinberg will erect 2-story apartment-house 4126-28 and 34 Delmar St.; cost \$34,000.

Mo., St. Louis.—F. L. Dittmeier will erect 4 apartment-houses 3815-19-23 Blaine St.; 2 stories; cost \$16,000; erect 1-story apartment 3138 Neosho St.; cost \$3000.

Mo., St. Louis.—Frank Vit will erect apart-

ment-house at 3170-72 Oregon Ave.; two stories; cost \$5500.

Mo., St. Louis.—August Beckmeier will erect two-story apartment-house at 3950 Natural Bridge; cost \$5000.

Mo., St. Louis.—F. W. Gieselman will erect apartment-house at 3225 Nebraska St.; two stories; cost \$4000.

Mo., St. Louis.—Agnes Petring will erect 2-story apartment-house 2733 Greer St.; cost \$4200.

Mo., St. Louis.—Henry Grote will erect apartment-house 4137 Virginia St.; 2 stories; cost \$3200.

Tenn., Chattanooga.—H. M. Lust purchased 8 dwellings on W. 9th St. and will remodel for apartment-house.

Tenn., Knoxville.—C. M. Himel of Baker-Himel school has plans by Charles I. Barber to remodel school building into apartment-house; 12 apartments; cost \$5000.

Tex., Houston.—Stowe & Stowe, Galveston and Houston, preparing plans for apartment-house; three stories; hollow tile; stucco; 32x75 ft.; composition roof; gas heat; electric lighting.

Tex., Houston.—Green & Finger are preparing plans for apartment-house on Main St.; 3 stories; 8 five-room apartments; store on first floor; cost \$30,000.

Tex., Houston.—E. G. Prince has plans by C. C. McDonald for apartment-house at 1610 Walker Ave.; 6 four-room apartments; cost \$18,000.

Tex., Houston.—Mrs. E. N. Gray has plans by Teich & Gideon for duplex apartment-house at Fannin St. and Dennis Ave.; 2 six-room apartments; stucco; cost \$7500.

Va., Richmond.—Claude E. Sprengle will erect five apartment-houses on Cary St.; brick; cost \$33,000.

ASSOCIATION AND FRATERNAL

Fla., Miami.—Independent Order of Odd Fellows will erect home for widows and orphans.

Ky., Frankfort.—Young Men's Christian Association will expend \$12,500 for improvements to building.

Ky., Carlisle.—Ancient Free and Accepted Masons, Daugherty Lodge, No. 65, will erect temple on Locust St.

La., Independence.—Adam Kluchin has

enclosed porches on three sides; plans by Jones & Furbinger, 119 Porter Bldg., Memphis. (Lately noted.)

Tex., Dallas—Jail, etc.—H. A. Overbeck, architect, 503 Juanita Bldg., writes Manufacturers Record that bids for Dallas county criminal court and jail building will be opened Sept. 10; 9 stories and basement; reinforced concrete. (Lately noted to receive bids until Sept. 13.)

Va., Richmond—Rest Station.—City, J. E. Butler, building inspector, will expend \$5000 to erect rest station; 50x50 ft.; steam heat; electric lighting; slate roof; plans by Carneal & Johnston, Richmond. (Recently noted to receive bids until August 26.)

W. Va., Hamlin—Jail.—Lincoln county has plans by Falls City Construction Co., Louisville, Ky., for jail and jailer's residence; fireproof; cost \$20,000; bids opened August 26; plans from W. C. Holstein, County Clerk. (Recently noted.)

W. Va., Huntington—Fire Station.—City will expend \$25,000 to erect fire station; 90x140 ft.; mill construction; Barrett roof; cost heating plant, \$3000; plans by W. B. Smith, 7 Harvey Bldg., Huntington. (Recently noted to receive bids until August 27.)

COURTHOUSES

Fla., West Palm Beach.—Palm Beach County Commissioners, R. H. Rousseau, chairman, will expend \$150,000 to erect courthouse; 70x140 ft.; reinforced concrete; fireproof; no heating; electric lighting; tar and gravel roof; plans by Talley, Summer & Hamilton, Jacksonville. (Recently noted to receive bids until Oct. 9.)

La., Oberlin.—Police Jury of Allen Parish opens bids Sept. 4 to erect courthouse; among contractors estimating are: F. A. Noulett & Son, New Orleans; Delatette & Le Grange, Lake Charles; L. R. Wright & Co., Dallas, Tex.; Falls City Construction Co., Louisville, Ky.; Edgfield & Nashville Manufacturing Co., Nashville, Tenn.; plans by Pavot & Lavaudais, New Orleans. (Lately noted.)

Tex., Dallas.—Dallas county opens bids Sept. 10 to erect courthouse and jail previously noted; H. A. Overbeck, architect, 503 Juanita Bldg. (See "City and County.")

Tex., Farwell.—Farmer county voted \$50,000 bonds for courthouse. Address County Commissioners. (Lately noted.)

DWELLINGS

Ala., Birmingham.—Hillman-Watts Land Co. will expend \$10,000 to erect 14 negro dwellings; eight 28x40 ft. and six 28x36 ft.; ordinary construction; grates; granitoid composition roof; day labor. (Recently noted.)

Ala., Birmingham.—R. G. McCarty will erect residence; 2 stories; brick veneer; cost \$7200.

Ala., Birmingham.—Albert Hanson will erect 2 frame dwellings on Bay Ave.; 2 stories; cost \$8000.

Ala., Mobile.—S. Griffin will remodel dwelling at 20-22 S. Royal Ave. cost \$5000.

Fla., Pensacola.—M. Louis Anderson has plans by Alfred & Alfred, Pensacola, for residence; 34x56 ft.; frame; cypress shingle roof. (Recently noted.)

Fla., St. Petersburg.—H. W. Gilbert will erect residence; fireproof; brick or concrete; cost \$5000.

Fla., Tampa.—H. R. Lightfoot has plans by Bonfoey & Elliott, Tampa, for bungalow; cost \$6000.

Ga., Atlanta.—F. A. Quillian will erect residence at 657 Ponce de Leon Ave.; two stories; cost \$8000.

Ga., Atlanta.—H. H. Clark will erect dwelling at 181 N. Moreland Ave.; 2 stories; frame; cost \$4000; day labor.

Ga., Atlanta.—H. H. Bailey will erect dwelling at 257 St. Charles Ave.; 1 story; frame; cost \$3750; day labor.

Ga., Atlanta.—John M. George will erect 2 dwellings 77 and 85 Drewry St.; 1 story; frame; cost \$3500; day work.

Ga., Atlanta.—Miller & Cook will erect 2 dwellings 154 and 160 Linwood St.; frame; cost \$8500; day work.

Ga., Atlanta.—W. C. Harper will erect residence 454 Williams St.; 2 stories; frame; cost \$3000; day labor.

Ga., Atlanta.—Phoenix Investment Co. will erect residence at 425 Washington St.; two stories; frame; 16 rooms; cost \$17,000.

Ga., Atlanta.—Mrs. J. O. Hipp will erect \$4000 bungalow.

Ga., Savannah.—D. D. Stanton of Stanton Drug & Art Co., Whitaker and Liberty Sts., will erect residence in Avondale.

Ga., Savannah.—Paul A. Jurgenson will erect 3 1-story dwellings on W. 37th St.

Ky., Louisville.—Charles Chrestie will erect 3 frame cottages 401-03 S. 32d St.; cost \$4500.

Ky., Louisville.—D. E. Doherty will alter buildings 439-43 S. Brook St.; cost \$4000.

Ky., Louisville.—F. H. Nesmith will erect residence at 2147 Alta Ave.; brick veneer; cost \$4500.

La., Donaldsonville.—A. J. Melancon will erect residence.

La., Donaldsonville.—J. O. Broussard will erect dwelling.

La., Harvey.—Dr. G. L. Odom will erect residence; cost \$5000.

La., New Orleans.—E. Levy will erect residence on Saratoga St.; two stories; frame; cost \$5000.

La., New Orleans.—Charles J. Testard, cashier of Ruddock Orleans Compress Co., will erect residence.

La., New Orleans.—H. A. Brenner will erect dwelling on Neron St.; 2 stories and basement.

La., New Orleans.—Mrs. Louise Gruber will erect 2 double dwellings on Bienville St.; frame; cost \$4500.

La., New Orleans.—W. Leiger will erect 2 double frame dwellings on Rocheblave St.; cost \$5100.

La., New Orleans.—William Seart will erect three double dwellings on Perdido St.; frame; cost \$4200.

La., New Orleans.—Mrs. P. Rouchou will erect double residence; frame; cost \$5000.

La., New Orleans.—Mrs. E. M. Miller will erect residence; frame; cost \$5000.

La., New Orleans.—H. F. Mehrtens will erect residence; frame; cost \$3000.

La., New Orleans.—Eugene Lyons will erect residence; frame; cost \$3500.

La., New Orleans.—C. W. Downs will erect residence; 2 stories; cost \$3500.

La., New Orleans.—Mrs. Mary Maloney will erect 2-story frame dwelling on St. Claude St.; cost \$3948.

La., New Orleans.—P. Kaul will erect double residence on Eleanore St.; two stories; frame; cost \$4000.

Md., Baltimore.—Joseph L. White Realty Co., 1601 N. Broadway, will erect number of 2-story dwellings on Monument St. near Potomac St.

Md., Baltimore.—William Fusselbaugh of Fusselbaugh-Blake Co., 34 S. Howard St., will erect residence on Greenway St.

Md., Baltimore.—Frederick W. McComas, 15 W. Chase St., and Howard S. Kroh, 608 Woodlawn Rd., Roland Park, Md., are reported as to erect residence on Manor Ave.

Md., Baltimore.—Provident Realty Corporation, Garrison and Piedmont Aves., has plans by Henry J. Tinley, 312 N. Charles St., for dwelling on Rosslyn Ave. near Bateman Ave.; 2½ stories; frame; slate roof; 26x52 ft.; steam heat; cost \$3500.

Md., Baltimore.—John Daniels, Secy. Social Service Corporation, Garrett Bldg., has plans by E. L. Palmer, Jr., 112 Elmhurst Rd., Roland Park, Md., for dwelling at Gullford; 2½ stories; brick. (Previously noted.)

Md., Baltimore.—St. Mark's Lutheran Church has tentative plans for parsonage at 107 N. Broadway; three and two stories; 66 ft. 6 in. by 17 ft. 7 in. by 33 ft.; ordinary construction; steam heat; gas and electric lighting; slag roof; cost \$4500; proposals may be addressed to John Lassahn, 940 Columbia Ave.; contract let about Sept. 1; Rev. John F. Mueller, pastor, 200 S. Chester St.

Md., Catonsville.—Edward Harris has plans by George R. Callis, Knickerbocker Bldg., for residence; stone and frame; 2½ stories; 52x33 ft.; cost about \$8000.

Md., Roland Park.—Justus C. Stehl, 2300 McCulloch St., has plans by W. L. Wirsing for residence; following contractors were invited to bid: J. Henry Smith, 1426 Light St.; Willard E. Harn Co., 213 N. Calvert st.; Robinson Construction Co., 66 Knickerbocker Bldg., and John J. Moylan, 117 E. Center St., all of Baltimore, Md., and Roland Park Co., 408 Roland Ave., Roland Park.

Mo., St. Louis.—J. Szepanski will erect four one-story dwellings at 3715-25 Marcus St.; cost \$8000.

Mo., St. Louis.—McPherson Avenue Development Co. has plans by Bush-Burns Realty Co. for residence on Kingsbury Pl.; cost about \$20,000.

Mo., St. Louis.—Henning Trust Co. will erect 2 1-story dwellings 333-35 Union St.; cost \$3400.

Mo., St. Louis.—Mary Vogelsang will erect

residence 3105 Minnesota St.; 2 stories; cost \$3500.

Mo., St. Louis.—H. Eck will erect dwelling and store at 3428-30 Itaska St.; 2 stories; cost \$4000.

Mo., St. Louis.—Walter A. Reed will erect dwelling and store at 2301 Mimika St.; 2 stories; cost \$3000.

N. C., Asheville.—W. B. Coarsey, Tampa, Fla., and two brothers are reported as to erect residences.

N. C., Asheville.—R. L. Ellis will not at present erect dwelling, as recently reported.

N. C., Greenville.—D. E. House has plans by Benton & Moore, Wilson, N. C., for dwelling; mill construction; hot-water heat; Spanish tile roof; cost \$4000 to \$5000.

S. C., Lexington.—Samuel B. George will erect two-story residence; metal roof.

Tenn., Jackson.—Wm. Holland will erect residence on Highland Ave.; brick; cost \$7000.

Tenn., Jackson.—Mrs. Brooks Long will erect residence on Louise Ave.; brick; cost \$4000.

Tex., Cuero.—F. W. Jaeggli has plans by Whipkey & Dickerson for residence.

Tex., Dallas.—B. H. Moody will erect residence 4142 Cole St.; 10 rooms; cost \$4750.

Tex., Dallas.—J. A. Traylor will erect residence 116 S. Rosemont St.; 2 stories; frame; cost \$3000.

Tex., Dallas.—C. N. McGaffey will erect residence; 12 rooms; 2 stories; cost \$3250.

Tex., Dallas.—J. D. Aldredge will erect residence 482 Gaston St.; 8 rooms; 2 stories; frame; cost \$4500.

Tex., Dallas.—Chandler Bros. will erect dwelling 123 S. Willomet St.; 8 rooms; 2 stories; frame; cost \$3500.

Tex., Edna.—M. K. Staples will erect bungalow.

Tex., Edna.—C. Branch will erect \$7000 colonial residence.

Tex., El Paso.—Coles Building & Real Estate Co. will erect 5 bungalows; cost \$14,500.

Tex., Galveston.—Stowe & Stowe, Galveston and Houston, preparing plans for several bungalows.

Tex., Houston.—Stowe & Stowe, Galveston and Houston, preparing plans for several bungalows.

Tex., Houston.—Clarence C. Smith will erect residence in Hyde Park; 6 rooms; cost \$4000.

Tex., Houston.—William A. Wilson Co. will erect bungalow on Walker Ave. and Morrison Ave. and remodel dwelling on Reichman St.; cost \$6200.

Tex., Houston.—B. Cohen will erect residence on Crawford St.; cost \$4000.

Tex., Houston.—G. W. Tharp will erect residence, servants' house and garage on Leeland Ave.; cost \$3000.

Tex., Houston.—C. C. Lewis will erect residence at Audubon Place.

Tex., Houston.—Dr. T. L. Blaney of Rice Institute will erect residence in Montrose; Spanish mission; 9 rooms; 4 sleeping porches; cost \$12,000.

Tex., San Antonio.—Miss Rosa Ehrens-worth will erect residence on Berkshire Pl.; 8 rooms; cost \$3000.

Tex., San Antonio.—Jackson & Hillje will erect two dwellings on La Chappelle Al.; cost \$3000.

Tex., San Antonio.—H. Rilling will remodel and erect addition to dwelling on Commerce St.; cost \$3500.

Tex., San Antonio.—Fred D. Whiting, 129 College St., will expend \$3500 to erect dwelling recently noted; 8 rooms and bath; 2 stories; mill construction; gas and electric lighting; shingle roof; plans by W. A. Barty; construction by owner. (See "Machinery Wanted.")

Tex., San Antonio.—Home Building & Investment Co., B. L. Rayborn, Pres., increased capital stock from \$50,000 to \$250,000.

Tex., Yorktown.—J. C. Buck will erect residence.

Va., Roanoke.—J. A. and A. P. Martin will erect 2 dwellings on N. Tazewell Ave.; 2 stories; frame; cost \$3000.

GOVERNMENT AND STATE

Ga., Bainbridge.—Postoffice.—Treasury Department, Office of Oscar Wenderoth, Super. Archt., Washington, opened bids for post-office; Algernon Blair, Montgomery, Ala., is lowest bidder at \$53,621 for limestone and \$56,650 for sandstone construction; 2 stories; 3800 sq. ft.; fireproof; stone facing; tin roof. (Lately noted.)

Okla., Enid.—Institute.—Board of Public Affairs, Mercantile Bldg., Oklahoma City, receives bids until Sept. 8 to erect buildings at Institute for Feeble-Minded; plans and specifications at office of Shaw & Crowell, architects, Enid; Office of Board of Public Affairs, and W. L. Kendall, superintendent, Enid. (Lately noted.)

HOTELS

Fla., Pablo Beach.—Pablo Pier & Hotel Co., R. S. Hall, Pres., Ocala, Fla., will erect 150-room hotel. (See "Miscellaneous Construction.")

Ga., Columbus.—Columbus Georgia Hotel Co., J. Ralston Cargill, Pres., will erect hotel; 8 stories; steel and concrete; semi-fireproof; steam heat; electric lighting; electric and plunger elevator; slag, tin and tile roof; cost \$150,000; bids opened Sept. 8; plans by Ludlow & Peabody, 101 Park Ave., New York, to whom proposals may be addressed. (Previously noted.)

Ga., Savannah.—Georgia Hotel Co. receives bids through Wallin & Young, architects, German Bank Bldg., Savannah, to complete 300-room hotel on which work was suspended; building completed to and including second floor; reinforced concrete and tile construction. (Previously noted.)

Tenn., Monteagle.—Nashville, Chattanooga & St. Louis Railway, H. McDonald, Ch. Engr., Nashville, is interested in erection of hotel.

Tex., Cooper.—Garrard Hotel Co., capital stock \$14,300, incorporated by T. T. Garrard, C. E. Anderson and C. L. Stevens.

Va., Monterey.—Bolar Springs Development Co. will expend \$15,000 in spring of 1914 to erect hotel and bathhouse. (Bolar Springs property at Highland recently noted purchased by Joseph S. Gibson, Monterey, and others.)

MISCELLANEOUS

Ark., Argenta.—Hospital.—Missouri Pacific Railway, J. R. Stephens, Ch. Engr., St. Louis, Mo., will erect \$9000 hospital.

Ark., Little Rock.—Arcade.—City Market & Arcade Co., Fred W. Allsopp, Secy., receives bids until Sept. 15 to erect building for market, stores, offices and apartments; plans and specifications by George R. Mann and Theodore M. Sanders, associated architects, 38 Urquhart Bldg., Little Rock; contractors may obtain plans from architects on deposit of \$50. (Previously described.)

Fla., Pensacola.—Hospital.—Catholic church, Rev. Father Thomas Kennedy, purchased site at East Hill and will erect hospital.

Fla., St. Petersburg.—Bathhouse.—B. A. Lawrence, Jr., will erect bathhouse on city recreation pier; cost \$5000.

Ga., Atlanta.—Greenhouses.—Atlanta Floral Co. will erect greenhouses.

Ga., Waycross.—Market.—Farmers' Union of Ware county and Waycross Trades and Labor Assembly will erect market.

Ky., Lexington.—Grandstand.—Lexington Baseball Co. will incorporate with \$20,000 capital stock to take over holdings of Hogan Yancy and Thomas Sheets and erect grandstand; Hub Dawson, Mgr.

Md., Baltimore.—Restaurant.—Childs Dining-Room Co., 200 5th Ave., New York, has plans by J. E. Westervelt, 36 W. 34th St., New York, for improvements to building at Charles and Fayette Sts.; among contractors bidding are W. E. Lewis of New York and Consolidated Engineering Co., Emerson Tower Bldg., Baltimore. (Lately noted.)

Mo., St. Louis.—Sanitarium.—Missouri Baptist Sanitarium will erect \$100,000 addition to sanitarium.

Mo., St. Louis.—Skating Rink.—Grand Amusement Co. will erect skating rink and office building on Morgan St.; cost \$35,000.

Mo., St. Louis.—Shed.—J. Lunsman will erect shed 1441-43 N. 24 St.; 1-story; cost \$3000.

Mo., St. Louis.—Nursery.—Guardian Angel Settlement will erect nursery 1027-35 Marion St.; 3 stories; cost \$5000.

N. C., Asheville.—Sanitarium.—Dr. Karl von Ruck, proprietor of Winyah Sanitarium, will erect 22-room addition to hospital; reported contract awarded at \$17,555. (Lately noted.)

N. C., Asheville.—Hospital.—Managers of Mission Hospital have plans by Wm. H. Ford, 17 Church St., Asheville, for fireproof hospital; details not determined. (Previously noted.)

S. C., Greenwood.—Fair.—Greenwood County Fair Association, capital stock \$5000, incorporated by C. C. Wharton, J. T. Medlock and A. Roseberg.

Tenn., Jackson.—Auditorium.—West Tennes-

see Farmers' Institute, R. T. De Berry, Humboldt, Pres., will erect auditorium.

Tex., Brenham—Hospital.—Drs. Marek and Becker will erect veterinary hospital.

Va., Richmond—Bathhouse.—St. Andrew Association will erect bathhouse at Belvidere St. and Maiden Lane; brick; heating, ventilating and circulating equipment; cost \$6000.

RAILWAY STATIONS, SHEDS, ETC.

Ark., Heber Springs.—Missouri & North Arkansas Railroad, E. M. Wise, Gen. Mgr., Eureka Springs, Ark., will expend \$25,000 to erect freight depot, platforms, roundhouse, trackage, etc.

La., New Orleans.—New Orleans Railway, Light & Power Co., Hugh McCloskey, Pres., contemplates erecting depot at Lake Ave.

Md., Baltimore.—Pennsylvania Railroad Co., Alex. C. Shaud, Ch. Engr., Philadelphia, Pa., opens bids Sept. 3 to erect President St. warehouse and office building; 610x45 ft.; 1 and 2 stories; concrete, brick and steel; cost about \$100,000. Contractors estimating: Ed. Brady & Sons, 1109 Cathedral St.; Cowan Bldg. Co., 106 W. Madison St.; M. C. Davis, 15 E. Fayette St.; J. Henry Miller, 106 Dover St.; Singer-Pentz Co., 630 Equitable Bldg.; Charles McDermott, 2901 W. Baltimore St.; D. V. Ault & Co., 65 Knickerbocker Bldg.; Irwin & Leighton, 809 Keyser Bldg.; Braunn & Stewart. (Lately noted.)

N. C., Asheville.—Southern Railway, B. Hermann, Ch. Engr., Washington, D. C., will erect passenger and freight station at Mountain Home.

N. C., Shools (not a postoffice).—Southern Railway, B. Herman, chief engineer, 1300 Pennsylvania Ave., Washington, D. C., will not erect passenger station recently reported.

Tex., Beaumont.—Jefferson County and Beaumont Traction companies, Stone & Webster Corporation, owner, Boston, Mass., have building and will remodel for depot and office building; cost \$80,000.

Tex., Dallas.—Union Terminal Co., Murrell L. Buckner, Secy.; C. H. Dana, Ch. Engr., has final plans, to be accepted in Sept., for union station; 350x210 ft.; cost \$5,000,000. (Jarvis Hunt, Chicago, Ill., previously noted as architect.)

Tex., Houston.—Houston & Texas Central Railroad, W. G. Van Vleck, V. P. and Gen. Mgr., will expend \$300 to repair Central Depot.

SCHOOLS

Ala., Birmingham.—Howard College plans to expend \$3000 for improvements.

Ark., Argenta.—School district No. 9, Ed. Ripberger, Secy., will erect school on Batesville Rd.

Fla., Arcadia.—De Soto county will vote Aug. 30 on \$20,000 bonds for school. Address County Commissioners.

Fla., Arcadia.—City will vote on \$75,000 bonds for school. Address The Mayor. (Previously noted.)

Fla., Wildwood.—Wildwood School District voted bonds to erect school; plans not determined; cost \$12,000; bids opened September 22; information from W. H. McBurney. (Recently noted.)

Ky., Lexington.—Central Christian Church will erect three-story building; 47 rooms; plans by Smith & Bedford; cost \$17,650.

La., Gretna.—Jefferson Parish School Board has plans by Favrot & Lvaudais, New Orleans, for two-story school building.

Md., Baltimore.—Board of Awards, City Hall, receives bids until September 3 to erect addition for domestic science rooms at Eastern Female High School, Broadway and North Ave.; drawings, etc., on file at office of C. E. Stubbs, Building Inspector, City Hall; certified check \$250.

Md., College Park.—Maryland Agricultural College trustees engaged B. C. Flournoy and Addison H. Flournoy, 1512 H St. N. W., Washington, D. C., to prepare plans for dormitory; 218x40 ft.; fireproof; limestone facing; 3 stories; brick and stone; colonial type; slate roof; heating and lighting from central plant; 5 hand trunk lifts; cost \$100,000; bids opened about Oct. 1; John Hubert, 201 N. Charles St., Baltimore, chairman of committee to consider plans. (Previously noted.)

Mo., Pittsburgh.—City votes Sept. 23 on \$22,000 bonds to erect four-room addition to Forest Park school, remodel structure and install heating and ventilating equipment in Eugene Field and Lakeside buildings. Address The Mayor.

Miss., Waynesboro.—Wayne County Supervisors ordered election to vote on \$2500 bonds for schools.

N. C., Brevard.—C. H. Trowbridge has plans by Sayre & Baldwin, Anderson, S. C., for administration building; 50x130 ft.; 4 stories; ordinary construction; steam heat; electric lighting; tin roof; cost \$25,000; bids opened Aug. 26.

S. C., Charleston.—Medical College of South Carolina, G. McF. Mood, Secy. Building Committee, opened bids to erect building; Simmons-Mayrant Co. lowest bidder at \$53,667 for construction, and A. J. Riley lowest bidder at \$3726 for heating; plans by Todd & Benson. (Lately noted.)

Tenn., Elora.—Town invites architects to submit plans to rebuild school reported burned; accommodate 175 scholars; concrete construction preferred; cost \$3000 to \$4000; address G. M. Pylant, member building committee.

Tex., Bloomington.—Bloomington School District No. 13 will expend \$10,000 to erect school; 2 stories; 6 or 8 rooms; ordinary construction; Barrett's tar and gravel roof; plans by Hull & Praeger, Victoria, Tex.; plans ready for bids about Sept. 1. (Recently noted.)

Tex., Brownsville.—City is considering \$30,000 bond issue for schools. Address The Mayor.

Tex., Centerville.—Joe H. Seale will open bids Sept. 8 to erect school; plans on file with Dennis R. Walsh, Austin, Tex., after Sept. 1; 2 stories; brick.

Tex., Comanche.—George L. Sullivan receives bids until Aug. 29 for two-story brick school; plans and specifications at office of Walter E. Taylor, Box 655, Fort Worth, or from Mr. Sullivan.

Tex., Genoa.—City voted \$3000 bond issue for schools. Address The Mayor.

Tex., Hartley.—Hartley School District No. 1, A. B. Cullender, Secy., opens bids Sept. 10 to erect school; 60x70 ft.; 7 rooms and basement; brick and cement; metal roof; cost \$13,000; plans by C. Hissler, Amarillo, Tex. (Recently noted.)

Tex., Hubbard.—City voted \$30,000 school-building bonds. Address The Mayor. (Lately noted.)

Tex., Minter.—City voted bond issue to erect school. Address The Mayor.

Tex., Rock Island.—Rock Island Independent School District voted \$29,000 bond issue for schools. Address District Trustees.

STORES

Ala., Birmingham.—M. P. Messer and associates will not erect building recently reported.

Ala., Birmingham.—City Investment Co. will erect one-story store at Third Ave. and 10th St.; cost \$3000.

Ala., Birmingham.—R. D. Burnett will improve Burnett store in Brown-Marx Bldg.; increase floor space, install soda water and cigar equipment, etc.; cost \$10,000.

Ala., Mobile.—Miss Kate McDonald will erect two-story building in Government St.; cost \$6230.

Ark., Little Rock.—A. Froug will remodel store at 224 Main St.; cost \$15,000.

Ark., Little Rock.—City Market & Arcade Co., Fred W. Allsopp, Secy., receives bids until Sept. 15 to erect arcade, store building, etc. (See "Miscellaneous.")

Fla., Fort Myers.—H. E. Heltman will erect business block on 1st St.; brick; cost \$50,000.

Fla., Pensacola.—Ed. W. Lawrence will erect 3 stores.

Fla., Zephyrhills.—Joseph H. Pridk will erect business block.

Ga., Augusta.—J. Silver & Bro. will rebuild burned store and remodel adjoining building, converting into one.

Ga., Tallapoosa.—B. A. Styles will erect store.

Ga., Washington.—R. A. Almand will expend several thousand dollars to improve business building; install plate-glass fronts, etc.

Ky., Adairville.—Byars & Fugate will rebuild stores; 165x40 ft. and 20x105 ft.; brick; steam heat; roofing not decided; construction under owners' supervision; recently reported burned. (See "Machinery Wanted.")

Ky., Louisville.—Peter Helenthal will erect brick store at 629 S. Shelby St.; cost \$2300.

La., Independence.—Adam Kluchin has plans by Nolan & Torre, 415 Hennen Bldg., New Orleans, for two stores and lodge building to replace structure previously reported burned.

Md., Hagerstown.—Maryland Real Estate Co. will remodel building for store and apartment-house. (See "Apartment-houses.")

Mo., Kansas City.—South Side Investment Co. will erect Terminal Arcade Bldg. for

stores and offices; 386x93 ft.; 1 and 2 stories; capacity for 3 additional stories on one part and 2 additional stories on other; fireproof; heating and electric lighting in general contract; composition roof; plans by Holabird & Roche, Monroe Bldg., Chicago. (Recently noted.)

Mo., St. Louis.—Walter A. Reed will erect store and dwelling at 2301 Mialka St.; 2 stories; cost \$3000.

Mo., St. Louis.—H. Eck will erect store and dwelling at 3428 30 Itaska St.; 2 stories; cost \$4000.

Mo., St. Louis.—August G. Hafnagle will not erect store and apartment-house recently reported.

N. C., Asheville.—Elks' Home Co. will erect store and lodge building. (See "Association and Fraternal.")

N. C., Selma.—M. C. Winston & Son will erect 2 stores; press brick; 30x100 ft.; 2 stories.

S. C., Spartanburg.—E. B. Dean and S. B. Wilkins will erect store on East Main St.; 3 stories.

Tenn., Erwin.—L. H. Phetteplace will expend \$17,000 to erect mercantile building recently noted; 55x100 ft., with "L" 30x25 ft.; brick; ordinary construction; electric lighting; coal tar pitch, felt and slag roof; plans by C. G. Mitchell, Johnson City, Tenn.; J. H. Bowditch, Supt. of construction. (See "Machinery Wanted.")

Tenn., Nashville.—Burk & Co. will erect store on Church St.

Tenn., Nashville.—Lebeck Bros. will erect two stores on Broadway; cost \$5000.

Tex., Belasco.—H. A. Hall will erect business block.

Tex., Houston.—Green & Finger are preparing plans for store and apartment-house on Main St. (See "Apartment-houses.")

Tex., Lockhardt.—E. A. Masur will erect two-story brick store.

Tex., San Antonio.—Mrs. Caroline Kampmann will improve store; cost \$6000.

Tex., Teague.—J. L. Tait, 600 14th St. N. W., Washington, D. C., is reported, will erect six business blocks.

W. Va., Williamson.—S. W. Patterson contemplates erecting 4-story brick building; 80x110 ft.; cost \$60,000.

THEATERS

D. C., Washington.—B. F. Myers, Bond Bldg., prepared plans for theater on C St. N. E.; 40x36 ft.; tapestry brick; Indiana limestone trimmings; seating capacity 500; cost \$15,000.

Mo., St. Louis.—German Theater Co. will erect theater at 3531 Delmar St.; two stories; cost \$4000.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ala., Birmingham.—Louis Pizitz awarded contract Blake Construction Co. for apartment-house; 3 stories; 60x90 ft.; cost \$30,200.

D. C., Washington.—Timothy Brosnan, 617 F St. N. W., awarded contract A. H. Aylor, 820 Union Pl. N. W., to erect apartment-house at 707 1st St. N. W.; 3 stories; brick; cost \$30,000; plans by W. S. Plager, 210 N. Capitol St., Washington.

Fla., Bartow.—E. C. Stuart awarded contract John Bishop for brick work on apartment-house and store building; 3 stories; iron spot brick; 6 stores on first floor.

Mo., St. Louis.—M. Curry Giles awarded contract Fred Schroer to erect apartment-house; 3 stories; fireproof; cost \$30,000; plans by Roth & Stenly. (Lately noted.)

Mo., St. Louis.—Regina Investment Co., Mrs. Regina M. Carlin, Pres., awarded contract Hennig Construction Co. to erect apartments 910-12 S. Kingshighway; 3 stories; 100x114 ft.; 15 apartments; plans by James S. Lee; cost \$60,000.

Mo., St. Louis.—George Meyerson awarded contract Frank L. Dittmer to erect apartment-house on Blaine Ave.; 4 and 5 rooms each; tiled bathrooms; combination fixtures; granite cellars; cost \$25,000.

Tex., Bishop.—T. Z. Bishop will expend \$7500 to erect apartment-house; 2 stories; ordinary construction; plans by Adams & Adams, 515 Gibbs Bldg., San Antonio, Tex.; contract recently noted awarded to C. F. Harwood, Bishop.

Tex., El Paso.—R. S. Nichols will expend \$6000 to erect 2-family apartment-house; 30x35 ft.; Rex tile roof; plans by O. H. Thorman & Co., El Paso; contract recently noted awarded Mayfield Building & Improvement Co., American Bank Bldg., El Paso.

Va., Lynchburg.—M. L. Hoffheimer of Richmond, Va., will, it is reported, erect theater with seating capacity of 700.

WAREHOUSES

Ark., Arkadelphia.—Farmers' Co-operative Warehouse Co., capital stock \$5000, incorporated with T. A. Allison, Pres.; C. A. Weatherington, Secy., and L. L. Crawford, Treas.

Ga., Savannah.—J. Pechmann will erect one-story warehouse at 147 W. Broad St.

Ga., Savannah.—John G. Butler Building Supply Co. will erect frame warehouse on New St.

Ky., Carrollton.—J. F. Jett & Co. will erect 308x100-ft. warehouse.

Ky., Carrollton.—O. M. Wood & Son will expend \$12,000 to erect loose-leaf tobacco warehouse; 150x250 ft.; brick; asphalt roof; plans and construction by owner. (Recently noted.)

Ky., Eminence.—Eminence Distillery Co. will erect warehouse; daily capacity 10,000 lbs.

La., New Orleans.—Commissioners Port of New Orleans wire Manufacturers Record: "Proposed cotton warehouse to be modern fireproof building; estimated cost \$2,500,000; amount bond issue \$3,000,000; engineer, Samuel Young, 200 New Orleans Court Bldg." (Commissioners now endeavoring to perfect financial arrangements for comprehensive warehouse system which city has been planning.)

Md., Baltimore.—Neudecker Tobacco Co., Lombard St. and Market Pl., will erect warehouse at Lombard and South Sts.

Md., Baltimore.—Board of Estimates, City Hall, will remodel building for storehouse, garage and health department. (See "City and County.")

Mo., St. Louis.—A. Leschen Rope Co. will erect warehouse 291 Hamilton St.; two stories; cost \$60,000.

N. C., Raleigh.—Seaboard Air Line Railway, W. D. Faucette, Ch. Engr., Portsmouth, Va., will erect warehouse at Lane and Salisbury Sts.; two stories; brick; steam heat; cost \$10,000.

S. C., Sumter.—Chamber of Commerce is interested in erection of tobacco warehouse.

Tex., Dallas.—Texas-Ohio Cultivator Co. will erect warehouse 2230 S. Harwood St.; cost \$3000.

Tex., Dallas.—Boren & Stewart will erect warehouse, Lamar and Horde Sts.; 3 story and basement; brick; cost \$75,000.

Tex., Houston.—H. C. House will erect warehouse; cost \$10,000.

Tex., Marshall.—Marshall Fertilizer Co. will construct warehouse. (See "Foundry and Machine Plants.")

W. Va., Grafton.—A. Forella awarded contract Fortney Lumber & Hardware Co. to erect apartment-house and store building; 3 stories and basement; brick.

BANK AND OFFICE

Ky., Louisville.—Louisville Title Co., C. M. Phillips, Secy., purchased 3-story 33x80-ft. brick and stone building and will remodel; build fireproof vault, 20x20 ft., at cost of \$10,000; expend in furniture and fixtures same amount; contract awarded. (Recently noted.)

La., Homer.—Guardian-Journal has plans by and awarded contract to C. A. Hamil, Homer, to erect newspaper office; 30x75 ft. (Recently noted.)

Mo., St. Louis.—Best Clymer Manufacturing Co. awarded contract Kellermann Construction Co., Roe Bldg., for office building on Virginia Ave. (See "Canning and Packing Plants.")

CHURCHES

Fla., Newberry.—Methodist church awarded contract to A. D. Green, Fort White, Fla., to erect church.

Tenn., Lebanon.—Methodist church awarded contract at \$19,500 Walter S. Page to erect building; Rev. B. L. Lyle, pastor.

Tex., Dallas.—Forest Avenue Baptist Church awarded contract J. F. Duke, 2612 Peabody St., to erect building; 76x79 ft.; brick veneer; natural gas heat; electric lighting; shingle roof; cost \$16,000; plans by C. W. Bulger, Praetorian Bldg. (Recently noted.)

Tex., Quanah.—Catholic church awarded contract J. P. Ford, Goodlett, Tex., to erect church.

W. Va., Wheeling.—St. Andrew's Episcopal Church, James L. Fish, rector, 3636 Eoff St., awarded contract J. W. Beltz & Sons Co., and replace with shingles. (Recently noted.)

CITY AND COUNTY

Ala., Birmingham.—Warehouse.—City awarded contract Central (not Standard as recently reported) Contracting Co., Birmingham, to erect warehouse; cost \$8100.

Fla., Jacksonville.—City Hall.—City will expend \$4000 to \$5000 to erect addition to city hall; 36x30 ft.; copper cornice; gravel roof; plans by Mark & Shaftall, Jacksonville; contract recently noted awarded to Owens Building Co., Jacksonville; sub-contract to L. D. Naughton, Jacksonville.

Tex., Waco.—Firemen's Home.—City awarded contract to J. M. Bush of Waco to erect firemen's home; 30x50 ft.; ordinary construction; electric lighting; asbestos roof; cost \$16,500; plans by Edward H. Reed, 1903 Amicable Bldg., Waco. (Recently noted.)

N. C., Winston-Salem.—Hospital.—City awarded contract to Boyles-Robertson Construction Co., 1516 H St. N. W., Washington, D. C., to erect hospital; 100x70 ft.; reinforced concrete frame and floors; brick exterior; cost \$39,000; plans by P. Thornton Marye, Atlanta, Ga. (Contract lately noted awarded, but this not ratified.)

Tex., Angleton.—Jail.—Brazoria county awarded contract M. C. Daugherty, Angleton, to erect jail; steam heat; electric lighting; gravel roof; cost \$10,600; cell equipment contract to Paulty Jail Building Co., St. Louis, at \$481.50. (Recently noted.)

DWELLINGS

Ala., Edgewater (not postoffice).—Tennessee Coal, Iron & Railroad Co., George G. Crawford, Prest., Birmingham, awarded contract to erect 100 houses for mining camp; no architect. (Previously noted.)

D. C., Washington.—L. E. Breuninger, 3208 19th St. N. W., awarded contract H. L. Breuninger, 59 U St. N. W., to erect 2 2-story dwellings at 1645-1661 Hobart St. N. W.; cost \$10,900.

D. C., Washington.—Charles E. Tribby, 703 15th St. N. W., awarded contract J. H. Hoffman, 1009 8th St. N. W., to erect dwelling at 1225 28th St. N. W.; 2 stories; brick; cost \$3900.

D. C., Washington.—James D. Donnelly, 828 14th St. N. W., awarded contract D. E. Nichol, 424 Georgia Ave. N. W., to remodel 2 two-story dwellings at 826-28 14th St. N. W.; plans by B. Stanley Simmons, 1340 New York Ave. N. W.; cost \$2900.

D. C., Washington.—William Pary awarded contract William Sheppard Co., 1107 11th St. N. W., to erect dwelling at 3520 35th St. N. W.; 2 stories; frame; cost \$4000; plans by Gregg & Leisuring, 1330 New York Ave. N. W.

D. C., Washington.—H. A. Velth awarded contract Conrad M. Chaney, 629 8th St. N. E., to erect dwelling; 2 stories; frame; cost \$4000.

D. C., Washington.—Fred. L. Vogt, 2004 N St. N. W., awarded contract Randolph L. Jennings, 116 North Carolina Ave. S. E., to erect dwelling at 1309 New Hampshire Ave.; tapestry brick; 29x30 ft.; 3 stories and basement; cost \$15,000; plans by Oscar Vogt, 405 Corcoran Bldg.; will construct garage in rear.

D. C., Washington.—E. O. Wagenhorst, Bond Bldg., awarded contract to repair dwelling and store. (See "Stores.")

Fla., Miami.—L. E. Kloeber awarded contract Harlan A. Trapp to erect dwelling; 72x38 ft.; wood, stucco, metal lath and plaster; tile roof; cost \$10,000; plans by H. H. Mundy, Miami. (Recently noted.)

Fla., Tampa.—Miss Madge Mayburg awarded contract H. M. Cooley & Co. to erect residence; 2 stories; 29x45 ft.; frame; cost \$3000.

Fla., Gainesville.—First Baptist Church awarded contract W. B. Whelpley to erect parsonage on University Ave.; 2 stories; 9 rooms; cost about \$3500.

Ga., Atlanta.—Mrs. J. W. Feeney awarded contract C. E. Miller to erect residence Peachtree Pl.; 2 stories; frame; cost \$4000.

Ga., Atlanta.—Mrs. K. Welsiger awarded contract C. E. Miller to erect dwelling; 2 stories; frame; cost \$4700.

Ga., Atlanta.—J. H. Franklin awarded contract C. E. Miller to erect dwelling; 2 stories; brick veneer; cost \$7500.

Ga., Atlanta.—H. E. Jessup awarded contract Z. P. Quinn to erect residence 21 Avery Drive; 2 stories; frame; cost \$5250.

Ga., Atlanta.—W. N. Hawkes awarded contract F. M. Abernathy & Co. to erect residence at 752 W. Peachtree St.; cost \$5500.

Md., Baltimore.—Jacob R. Pfeiffer, 528 W. Lexington St., will erect two dwellings on Garrison Ave.; 2½ stories; 40x32 ft.; slate roof; steam heat; cost \$5900; plans by W. R. Russell, 616 Professional Bldg., Baltimore. Provident Realty Corporation, Garrison and Piedmont Aves., Baltimore, contractor.

Tenn., Memphis.—W. W. Watkins awarded contract D. S. Crouch to erect residence at 345 Rayburn Ave.; two stories; concrete; cost \$5000.

Tenn., Memphis.—John F. Holts, 169 Union Ave., awarded contract W. B. Edwards to repair dwelling, install front, etc.; cost \$3000.

Tenn., Memphis.—Mrs. M. L. Fraser awarded contract D. S. Crouch to erect residence at 1861 Central Ave.; two stories; stone and stucco; cost \$5000.

Tex., Galveston.—W. T. Armstrong awarded contract W. F. Westby, 811 Franklin Ave., Houston, erect dwelling; 60x100 ft.; hollow clay tile construction; hot-air heat; electric lighting; asbestos-slate roof; cost \$15,000; plans by Stowe & Stowe, Galveston and Houston. (Recently noted.)

Tex., San Antonio.—Otto Meerscheidt awarded contract L. P. Boltitt, 11 N. Cherry St., San Antonio, to erect dwelling; cost \$12,000; plans by B. W. Spillman, San Antonio. (Recently noted.)

Tex., Smithville.—A. T. Wilkes, cashier First National Bank, awarded contract to C. H. Turney to erect two dwellings.

Va., Berkeley.—L. F. Borrowdale of Foshburgh Lumber Co. awarded contract C. C. Johnson & Bro. to erect dwelling; frame; cost \$3500.

W. Va., Sherrard.—A. V. McCleary awarded contract for residence.

GOVERNMENT AND STATE

Mo., St. James.—Home.—State awarded contract McCarthy Lumber & Construction Co., Farmington, Mo., to repair dormitory; cost \$4500; plans by H. H. Hohenchild, St. Louis. (Recently noted.)

HOTELS

Fla., Jacksonville.—New Mason Hotel Co. awarded contract William P. Bannon, Louisville, Ky., for metal lathing and plastering work; general contract to Frank M. Richardson & Co., Jacksonville. (Previously noted awarding contract Southern Ferro-Concrete Co., Atlanta, for reinforced concrete skeleton frame.)

Mo., St. Louis.—Warwick Hotel Co. awarded contract to James H. Bright Contracting & Building Co., 708 Chestnut St., St. Louis, to erect hotel at Locust and 15th Sts.; 50x155 feet; eight stories; foundation capable of carrying two additional stories; 200 rooms; cost \$235,000; plans by G. F. A. Brueggeman, Third National Bank Bldg., St. Louis. (Company recently noted incorporated with \$125,000 capital stock.)

MISCELLANEOUS

Ga., Atlanta.—Clubhouse.—Druid Hills Golf Club has plans by Edward Dougherty, Candler Bldg., for clubhouse at Druid Hills; 60x200 ft.; stucco; 2 stories; steam heat; cedar shingle roof; cost \$39,000; contract awarded W. J. Cleckler.

Tenn., Greenville.—Hospital.—Kingsolver & Huddle of Bristol, Tenn., have contract to remodel Morgan Inn for hospital.

Tex., Dallas.—Exhibit Building.—Southwestern States Portland Cement Co. awarded contract Fred A. Jones Building Co., Dallas, to erect exhibit building at fair grounds; concrete; cement-tile roof; plans by Lang & Wittchell, Dallas. (Recently noted to cost \$4000.)

SCHOOLS

Ala., Florida.—Building Committee Covington High School awarded contract to S. F. Fulghum & Co., Pensacola, to erect school; 3 stories; brick; cost about \$17,000; plans by William Drago, 612 Audubon Bldg., New Orleans. (Lately noted.)

Ala., Woodward.—Woodward Iron Co. awarded contract Central Lumber Co. to erect 5-room school; cost about \$3000.

Ark., Texarkana.—West Side School Board, A. C. Stuart, Prest., awarded contract Tom Dalley for plumbing Central, Highland Park and negro schools; cost about \$3500.

Ga., St. Marys.—City awarded contract J. H. Banks, St. Marys, to erect school; 69x72 ft.; brick; metal shingle roof; cost \$9000; plans by J. de Bruyn Kops, Savannah. (Recently noted.)

La., Starke.—Directors will expend \$3500 to erect school; 32x62 ft., with "L" 32x32 ft.;

frame and plaster; Cortright metal shingle roof; plans by A. H. Humphry, Lake Charles, La.; contract awarded J. H. Hillman (not J. H. Hillman, as recently stated), Port Arthur, Tex.

Miss., Beaumont.—Board of Supervisors awarded contract at \$4450 for school; brick.

Tenn., Deptford (not a postoffice).—School Board awarded contract P. O. Rogers & Son, Chattanooga, Tenn., to erect school; 2 stories; brick; 6 recitation-rooms; 2 halls; cost about \$19,000.

Tenn., Union City.—Board of Education awarded contract H. L. Hubbard, McKenzie, Tenn., to erect school; 50x55 ft.; brick; metal-shingle roof; cost \$7000; plans by W. H. Spordlin, Fulton, Ky. (Previously noted.)

Tex., Edna.—School Board awarded contract to H. G. Jones, Port Lavaca, Tex., to erect school; two stories; brick; cost \$6475.

Tex., Huntington.—City awarded contract W. P. Berry to erect high school; brick; 2 stories; cost \$8000.

Tex., Streetman.—City awarded contract to Berry & Metcalf, Corsicana, Tex., to erect \$10,000 brick school building.

Tex., Strawn.—School Board awarded contract to erect school; cost \$13,500; plans by Elmer G. Withers, Stamford, Tex. (Lately noted.)

STORES

D. C., Washington.—E. O. Wagenhorst, Bond Bldg., awarded contract R. P. Whitty Co., 467 M St. S. W., to repair store and dwelling at 1116 H St. N. W.; plans by Cloughton West, 1416 Chapin St. N. W.; cost \$6000.

Fla., Bartow.—E. C. Stuart awarded contract for store and apartment building. (See "Apartment-houses.")

Fla., Tampa.—L. J. Jones awarded contract A. Bashford to erect business block

on Lafayette St.; three stories; brick; pile foundation; reinforced concrete frame; eight stores on first floor, each 20x75 ft.; slow-burning construction; cost \$45,000; also construct one-story warehouse in rear; 32x180 ft.; plans by F. M. Curtis, Tampa. (Lately noted.)

Md., Baltimore.—George Fava awarded contract R. B. Mason, 210 E. Lexington St., to erect store at 220 Park Ave.; 3 stories; brick; 17x18 ft.; tin roof; cost \$15,000; plans by J. H. & F. J. Thuman.

Md., Baltimore.—F. Schleuner, Jr., awarded contract to F. Stein, 17 S. Washington St., to erect store at 1013 E. Pratt St.; 20x30 ft.; brick; slag roof; cost \$1000; plans by owner.

Tex., Galveston.—M. Vrich awarded contract M. Rytch, Galveston, to erect store; two stories; 30x30 ft.; metal roof; plans by Stowe & Stowe, Galveston and Houston.

Tex., San Antonio.—George Lehr awarded contract L. P. Boltitt, 11 N. Cherry St., San Antonio, to erect store; 36x60 ft.; ordinary construction; brick; gravel roof; cost \$4000. (Recently noted.)

W. Va., Grafton.—A. Forcell awarded contract for store and apartment building. (See "Apartment-houses.")

WAREHOUSES

Ala., Birmingham.—City awarded contract to erect warehouse. (See "City and County.")

Fla., Tampa.—L. J. Jones awarded contract A. Bashford to erect warehouse and store. (See "Stores.")

N. C., Wilmington.—N. Jacobl Hardware Co. awarded contract R. H. Brady to erect addition to warehouse, 40x100 ft., making building 100x200 ft.; mill construction; electric elevator; Barrett specification roof; plans by J. F. Leitner, Wilmington. (Recently noted. See "Machinery Wanted.")

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Cordova.—Oak Leaf Coal Co. has begun grading for a railroad extension of three-quarters of a mile for two new mine openings.

Ark., Mountainburg.—\$2000 reported raised and \$1000 more will be raised for proposed railroad Winslow to Fort Smith via Mountainburg, about 40 miles. The Mayor can give information.

Ark., Heber Springs.—Missouri & North Arkansas Railroad quoted will build yard tracks and other improvements at Heber Springs. E. M. Wise, Eureka Springs, Ark., is general manager.

Fla., Tampa.—Atlantic Coast Line reported agreed with city on new bridge Hillsborough River. E. B. Pleasants, Wilmington, N. C., is chief engineer.

Fla., Tampa.—Tampa & Gulf Coast Railroad has graded about 15 miles of its 47 miles extension to Clearwater, the Pinellas Peninsula and St. Petersburg, Fla. C. H. Brown, Tampa, is Prest.

Ga., Atlanta.—Right of way is deeded to the Southern Railway and the Atlanta, Birmingham & Atlantic Railway for a double-track line across Mangum St. to Haynes St. to develop the proposed new industrial section of 2500 ft. frontage, and house tracks will be built as required from this lead track. H. W. Miller, Atlanta, is assistant to the president Southern Railway.

Ga., Forsyth.—R. L. Williams, Jr., of Macon, and formerly of Forsyth, is reported planning a railroad from Augusta via Macon to Columbus, Ga., about 240 miles, connecting also Washington, Union Point, Eatonton, Monticello, Juliette, Forsyth, Thomaston and Talbotton.

Ga., Irwinton.—A recent report that the Irwinton Lumber Co. was improving the Irwinton & McIntyre Railroad and proposed to eventually extend it to Dublin and the coast is denied.

Ky., Olympian Springs.—S. F. Crecellus, Louisville, is reported to have begun survey for proposed electric railway of the Olympian Springs Railway, Power & Light Co., Olympian Springs to Olympian Station, 4 miles. J. D. Wilson, Greensburg, is Prest.

La., Donaldsonville.—The St. Elmo, Belle Helene & Louisiana Eastern Railway Co., says a report, has completed and is operating its line from St. Elmo, opposite Donaldsonville, to the New River section, about 11 miles.

La., New Orleans.—Henry L. Zander and H. H. Gibson reported surveying for pro-

posed New Orleans & Western Railroad, all right of way being obtained. Otto F. Maier is V. P. and Gen. Mgr.

La., Shreveport.—Ward 7, Claiborne parish, reported voted \$50,000 to aid North Louisiana Electric Co. to build Shreveport to Monroe, 110 mi., via Homer, etc. A. B. Blevins, Prest. and Genl. Mgr.; G. N. Walker, Secy.; J. T. Hardiman, Chief Engr., Shreveport.

Miss., Gulfport.—St. Tammany parish in Louisiana reported voted bonds for Gulfport & Western Railroad. W. H. Hardy, Gulfport, president, quoted saying construction begins early this fall.

Miss., Laurel.—Laurel & Ellisville Interurban Railway completed and begun operation.

Mo., Hollister.—W. J. Campbell, St. Louis, reported interested and preliminary survey proceeding for electric railway several miles long connecting Hollister, Power Site and Branson; \$500,000 company proposed.

Mo., Poplar Bluff.—W. N. Barron, Gen. Mgr., Butler County Railroad, says company forces are expected to build extension to Piggott, Ark. Another report from Piggott says that construction has begun near there.

N. C., Wilson.—At an election it was voted to issue \$30,000 of bonds to aid construction of railroad Henderson to Wilson. The Mayor may give information.

Okla., Ardmore.—John Ringling of Chicago and Cecil Lyon of Sherman, Tex., reported contemplating construction of an interurban railway Ardmore to Sherman.

Okla., Ardmore.—James W. Good, Cedar Rapids, Iowa, and George S. Cravens, Milton, Iowa, interested in Ardmore street railway, reported considering plans for interurban railway Ardmore to Chickasha.

Okla., Henryetta.—Commercial Club says incorporation papers filed for Henryetta Interurban Railroad Co. to build thus: Henryetta to Muskogee; Henryetta to Okemah and Shawnee, to connect coal camps with Henryetta; total length, about 100 miles; directors, C. H. Kellogg, Wm. Brink, W. R. Wilson, J. W. Kincald and C. J. Harrison.

Okla., Moore.—Contract reported let to Matthew Cunyan for extension Oklahoma Railway Moore to Norman, about 8 miles, under charter Norman Interurban Railway, G. W. Knox, Prest.; also expects to build 16 mi., Edmond to Guthrie. Guy Treat is Chief Engr.

Okla., Poteau.—Col. C. C. Godman, Fort Smith, Ark., says he has under consideration construction of a railroad from Poteau to a connection with the Rock Island Lines at Monroe; also from Poteau north to Bokoshe,

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Air Compressor.—Swan Machinery Co., 124 E. 4th St., Joplin, Mo.—Air compressor; capacity about 800 cu. ft.

Beltting.—Ethel Cotton Mills, Selma, N. C.—Beltting for cotton factory.

Beltting.—See "Steel, etc."

Boiler Tubes.—Lighthouse Inspector, Custom-house, Baltimore, Md.—Bids until Sept. 15 to furnish boiler tubes. For specifications, etc., apply to inspector.

Bottles.—Johnson & Johnson Co., Raleigh, N. C.—Prices on 5-gallon carboys and 1/2-gallon bottles, such as used for bottling water in cases.

Brick.—Department of Justice, office of R. V. La Dow, Supt. Prisons, Washington, D. C.—Bids until Sept. 23 for furnishing and delivering at United States Penitentiary, Atlanta, Ga., enameled brick for laundry building, in accordance with specifications, copies of which, with information, are obtainable at this office.

Bridge Construction.—Water Department, Ezra B. Whitman, Engr., City Hall, Baltimore, Md.—Bids until Sept. 10 to construct steel highway bridge; 3 spans, 297 ft. center to center of end piers, and 2 27-ft. approach spans, carrying 20-ft. roadway over Gunpowder Falls; spans to be erected on piers and abutments provided by Water Board; plans and specifications obtainable at office of engineer.

Bridge Construction.—Liberty County Commissioners, J. B. Simmons, county judge, Liberty, Tex.—Bids until Sept. 1 to construct steel highway bridge across Trinity River; bidders to furnish their own designs, etc.

Bridge Construction.—Monongalia county, Robert D. Hennen, County Engineer, Morgantown, W. Va.—Bids for constructing several reinforced concrete bridges, 30 to 50-foot span; G. B. Hartley, engineer.

Building Materials.—Fred D. Whiting, 129 College St., San Antonio, Tex.—Prices on building materials, including electric fixtures, for \$3500 dwelling.

Building Materials.—Byars & Fugate, Adairville, Ky.—Prices on building materials.

Bucket (Orange Peel).—Walter A. Zeinicker Supply Co., St. Louis, Mo.—Orange peel bucket, 1/2 yd.; first-class condition.

Canning Machinery.—Georgia Canning Co., Fitzgerald, Ga.—Prices on canning machinery.

Canning Machinery.—H. W. James, Secy., Committee, Greenville, Fla.—Information on establishment of canning factory and prices on machinery.

Cart.—M. W. Purnell, City Clerk, Clarksdale, Miss.—Bids Sept. 2 for 2-wheel dumping garbage cart, about 2 cu. yds. capacity.

Clayworking Machinery, etc.—Seull & McNorton, 103 Princess Bldg., Wilmington, N. C.—Information on establishment of tile and pottery factory; kinds of clay, cost of equipment, etc.

Coal.—United States Engr., Room 305 Southern Bldg., Washington, D. C.—Bids until Sept. 6 for furnishing and delivering 4000 tons bituminous coal. Information on application. W. C. Langfitt, Lieut.-Col., Corps of Engrs.

Chemists' Supplies, etc.—Luigi Emilio Giacosa, Via Lamarmora 23, Turin, Italy.—Interested (view to agencies on commission) in lines of value to chemists and pharmacists.

Crane.—Samuel T. Williams, 223 N. Calvert St., Baltimore, Md.—Locomotive crane; steam-operated, to handle coal and lift about 1-ton boom over one car track to second track; second-hand preferred.

Concrete Machinery, etc.—Colony of Maryland, James O. McBride, Secy., Box 578, Kissimmee, Fla.—Concrete mixer and accessories, such as forms for blocks, piers and pillars.

Cutlery Manufacturers.—See "Razor Blades."

Drainage.—Anderson Chamber of Commerce, Porter A. Whaley, Secy., Anderson, S. C.—To negotiate with contractor prepared to bid on draining 1000 acres.

Dredge.—Leo A. Marrero, Gretna, La.—New or second-hand small dredge; not over 18 feet wide.

Dredging.—United States Engineers' Office, C. S. Riche, Lieut.-Col. Engrs., Galveston, Tex.—Bids until Sept. 11 for dredging harbor at Aransas Pass and channel from Aransas Pass to Corpus Christi, Tex. Information on application.

Dredging Machinery.—Southern Drainage & Construction Co., Kinston, N. C.—Two or more machines to dig lateral ditches from 3 ft. wide to 4 ft. deep and from 7 ft. wide to 7 ft. deep; machines suited to small roots and undergrowth and medium timber.

Drill Press.—See "Lathe, etc."

Electric Machinery.—Lakeland Dairy Farm, A. J. McDonough, Lakeland, Fla.—Interested in electric system.

Electrical Equipment, etc.—Office of Superintendent of Lamps and Lighting, Robert J. McCuen, City Hall, Baltimore, Md.—Bids addressed to Board of Awards, care Richard Gwynn, Esq., City Register, until September 3 for following: Electric arc and incandescent street lamps; electric current for all municipal buildings; mantle gas and naphtha street lighting; electric lamps or bulbs; enamel street signs. All items in accordance with separate specifications covering each contract, to be had at office of Superintendent of Lamps and Lighting.

Electric Lighting System.—Office of City Clerk, Howard, Kans.—Bids until August 29 to construct electric-light plant and system; drawings and specifications on file at office of W. K. Palmer Co., engineer, 519 Baltimore Ave., Kansas City, Kans., and with City Clerk.

Electric Machinery.—Samuel T. Williams, 223 N. Calvert St., Baltimore, Md.—25 to 30-K. W. generator; belted, 220 volts, D. C.; also 20-H. P. motor; 220 volts, D. C., with rheostat.

Elevator.—N. Jacold Hardware Co., Wilmington, N. C.—Prices on electric elevator.

Excelsior Machinery, etc.—Levert Lumber & Shingle Co., Lottle, La.—Machinery to manufacture excelsior and wood wool.

Filling Machinery.—See "Grinding Machinery, etc."

Filtration Plant.—A. R. Rosenberger, 408 First National Bank Bldg., Harrisonburg, Va.—Information relative to installation of filtration plant.

Flooring.—Ethel Cotton Mills, Selma, N. C.—Maple flooring for cotton factory.

Flour Mill.—D. R. Newman, R. F. D. No. 1, Blackstone, Va.—Small flour mill, 15 H. P.; wants address of manufacturer of "Midget" mill.

Glass.—L. H. Phetteplace, Erwin, Tenn.—Prices on plate glass for \$17,000 mercantile building.

Granite Curbing.—Commissioners of Public Works, D. B. McKay, chairman, Tampa Bay Casino, Tampa, Fla.—Bids until Sept. 2 for delivering 50,000 lin. ft. granite curbing on Tampa streets.

Grinding Machinery, etc.—American Products Corporation, E. S. Mahoney, Pres., Box 98, Portsmouth, Va.—Prices on machinery for grinding perfume and medicinal products into talcum and for filling receptacles.

Heating Plant.—L. H. Phetteplace, Erwin, Tenn.—Prices on steam-heating plant for \$17,000 mercantile building.

Heating Plant.—Commissioners State Institutions, Governor's Office, Tallahassee, Fla.—Bids until August 28 to install steam-heating and hot water system for Florida Hospital for Insane, Chattahoochee, Fla.; Bishop & Greer, architects, Valdosta, Ga.

Heating System.—A. R. Rosenberger, 408 First National Bank Bldg., Harrisonburg, Va.—Information on installation of central heating plant.

Hoists, etc.—Navy Department, Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-General, Washington, D. C.—Bids Sept. 16 for furnishing two 3-ton electric

hoists and pipe-threading and cutting-off machine, schedule 5804; 147,000 lbs. hot-rolled or forged steel, schedule 5805; delivery Navy-yard, Washington; 67 ft. iron stairway, schedule 5806; 46,500 lbs. structural steel, schedule 5807; delivery Washington, for Indian Head, Md.; for schedules apply to navy pay office nearest navy-yard.

Ice Plants.—Cary H. Rawls, Cerulean, Ky.—Addresses of manufacturers of ice plants.

Iron and Steel.—U. S. Engineer Office, Dallas, Tex.—Proposals until September 18 for iron and steel. Information on application. T. H. Jackson, Maj., Engrs.

Lathe, etc.—R. A. Zoeller, Tarboro, N. C. 18 in. to 24 in. swing by 12 ft. to 20 ft. bed engine lathe; also 24 in. to 30 in. drill press; good order. Send description and price.

Laundry Machinery.—E. M. Woods, R. 1, Gladwater, Tex.—Addresses of manufacturers of steam-laundry machinery.

Lead.—Lane Bros. Co., 505 Maryland Casualty Bldg., Baltimore, Md.—30,000 lbs. pig lead, in 8000 to 10,000-lb. quantities, delivered during next three months.

Levee.—Caddo Levee District, J. M. Sentell, Pres., Shreveport, La.—Proposals until Oct. 1 for earthwork, twelve-mile bayou, to cross bayou channel way; excavation, about 1,000,000 cu. yds.; information obtainable at office of Board of State Engrs., 213 New Orleans Court Bldg., New Orleans, or of Mr. Sentell.

Lighting Fixtures.—L. H. Phetteplace, Erwin, Tenn.—Prices on lighting fixtures for \$17,000 mercantile building.

Lime-grinding Plant.—Marshall Hane, mining engineer, Bridgewater, Va.—Prices on lime-grinding plant.

Letter-box Posts.—Postoffice Department, A. S. Burleson, Postmaster-General, Washington, D. C.—Bids received at office of Purchasing Agent, Postoffice Department, until Sept. 18 for furnishing letter-box posts, as may be ordered from time to time during term beginning Oct. 1, 1913, and ending April 30, 1917; proposal blanks with specifications to bidders furnished on application to Purchasing Agent.

Locomotive.—McEwen Lumber Co., Azalea, N. C.—Quotations on new or second-hand geared locomotive; about 20-ton.

Machine Tools.—Malang & Stevens Machinery Co., 377 Virginia Ave., Joplin, Mo.—Shaper; pipe-cutting and threading machine.

Marble Work, etc.—Elliott Wood, Supt. United States Capitol Building and Grounds, Washington, D. C.—Bids for interior trimmings and finish, plain and ornamental plastering, interior marble work, plate glass, extension of nail chutes and gravity conveyors, hardware, electric-lighting fixtures, plumbing and steam-fitting material; plans and specifications issued soon, together with information as to dates of opening bids.

Metal-working.—Autolux Co., C. H. Cannon, Mgr., Abbeville, S. C.—Addresses of manufacturers, with view to placing order for manufacture of small metallic attachment for alarm clock; parts include sheet-metal case, coil-wire springs and framework stamped from sheet metal.

Motor Cars.—Lee Paul, 112 N. 9th St., Richmond, Va.—Addresses of manufacturers of motor cars.

Mixer.—See "Concrete Machinery, etc."

Office Equipment, etc.—Luigi Emilio Giacosa, Via Lamarmora, Turin, Italy.—Interested in American products (view to agencies on commission), including "Small machineries lines for offices, banks, Government offices departments use."

Partitions.—J. S. White, Secy., Building Committee, Presbyterian Church, Mebane, N. C.—Prices on folding, sliding or raising doors for church.

Paving, etc.—Board of Commissioners, R. H. Jenness, Commissioner Finance, Okmulgee, Okla.—Bids until September 1 to construct pavement in District No. 5; 1450 cu. yds. earth excavation, 632 sq. yds. asphalt paving, 808 sq. yds. brick paving 3 car tracks, 280 lin. ft. curb and gutter, 254 lin. ft. armored curb and gutter, 1600 sq. ft. concrete crossings removed, 254 lin. ft. 3x10-in. oak headers and 40 lin. ft. water services.

Paving, etc.—Executive Board, A. H. Wearn, clerk, Charlotte, N. C.—Bids until Sept. 3 to construct 4,452 sq. yds. paving and 11,688 sq. yds. cement sidewalks; bitulithic, sheet asphalt and asphaltic concrete; plans and specifications at office of Joseph Firth, City Engr.

Paving.—Office of Paving Commission, R. Keith Compton, Chrm. and Consulting Engr., Baltimore, Md.—Bids until September 3 to grade, curb and pave with granite block, vit-

connecting with the Midland Valley and Fort Smith & Western railroads; thence to Cowlington, about 45 miles altogether.

Okla., Pawhuska.—C. C. Godman, Fort Smith, Ark., contractor, says expects to begin active work Pawhuska to Carney, Kans., 52 miles, Sept. 1 to 10. Bridges, 2 steel and 2 wood. J. B. Tolson is Pres., Pawhuska.

Okla., Tulsa.—Application filed to charter Oklahoma & Texas Pacific Railroad, projected by W. E. Hawley of New York and Tulsa. Route is from Northern Oklahoma boundary in Nowata county southwest to Love county, about 300 miles, traversing also Rogers, Washington, Osage, Tulsa, Creek, Okmulgee, Okfuskee, Lincoln, Seminole, Pottawatomie, Cleveland, McClain, Garvin, Stephens, Carter and Jefferson counties; capital \$100,000. Among the stockholders are W. E. Hawley, Frank Z. Curry and C. L. Huonker of Tulsa, W. J. Carnes and Edward S. Edge of Cleveland and J. H. Cleveland of Skiatook.

S. C., Anderson.—Charleston & Western Carolina Railway Co. contemplates construction of new passenger station at Anderson, with new tracks. A. H. Porter, Augusta, Ga., is engineer.

S. C., Greenville.—Rumored Carolina, Clinchfield & Ohio Railroad contemplates extension Spartanburg to Greenville, 32 miles. Ward Crosby, Johnson City, Tenn., is Ch. Engr.

Tenn., Nashville.—Tennessee & Kentucky Railroad Co., capital \$10,000, applied for charter to build from Nashville via Springfield, Tenn., and Adairville to Russellville, Ky., about 50 miles. Construction to begin immediately; incorporators, J. P. Helms, A. G. Merritt, Jr., H. J. Sperry, Paul B. Denton, B. F. Cornelius, R. W. Bratton, J. C. Collins, Clyde Shropshire, J. L. Weakley, J. W. Tilford and A. C. Ferris.

Tex., Houston.—Franchise granted to Houston & Texas Central Railway for 8-mile cut-off, Eureka to Pierce Junction or Stella to Eureka Junction, near Houston. W. G. Van Vleck is V.-P. and Gen. Mgr., Houston.

Tex., Sugarland.—Sugarland Railroad reported to build 23-mile extension to near Brookshire to connect with Missouri, Kansas & Texas Railway. W. T. Eldridge is Pres. and Gen. Mgr.

Tex., Temple.—R. A. Taylor is reported about to begin survey for the proposed Temple Northwestern & Gulf Railway. W. S. McGregor is V.-P. and Gen. Mgr.

Tex., Terrell.—Terrell-Canton-Tyler Railroad Co. proposes construction Terrell to Tyler, 70 miles, via Canton and Ben Wheeler. L. E. Griffith, Jr., Terrell, is chairman.

Va., Bluemont.—O. M. Bundy, Ch. Engr., Washington & Old Dominion Railway, 2506 M St. N. W., Washington, D. C., says company has made no surveys for extension Bluemont to Berryville, Va.

W. Va., Clark.—Elkhorn Valley Traction Co. of Clark chartered to build electric railway; capital \$100,000. Incorporators, L. E. Tierney, Powhatan; L. H. Clark, Kyle; W. E. Stuart, Keyser; C. C. Cale, Keystone; A. Katzen, North Fork.

W. Va., Morgantown.—Morgantown & Wheeling Electric Railway reported will immediately extend Cassville to Blacksville, 14 miles. J. Ami Martin is Gen. Mgr., Morgantown.

STREET RAILWAYS

Fla., Sarasota.—Franchise for street railway asked by E. O. Burns, through C. B. Fish, attorney.

Ga., Macon.—Macon Railway & Light Co. applied for permission to build double track on Spring St. from Ocmulgee St. to Spring St. bridge.

S. C., Anderson.—Commission is granted to the North Anderson Street Railway Co., capital \$15,000; incorporators, John W. Linley, G. N. C. Boleman, J. D. Hammett, J. H. Anderson and J. D. Brown. Franchise obtained.

Tex., Marshall.—Marshall Traction Co. proposes to extend to Turney Park.

Va., Norfolk.—M. Umstadter is quoted saying an elevated railroad on Water St. is contemplated and plans will be submitted to the City Council. Company to be chartered.

W. Va., Newell.—Newell Bridge & Street Railway Co. incorporated to merge Newell Street Railway Co. and Newell Bridge Co. and build electric railway and bridge over the Ohio River. May also extend. Capital \$500,000. Incorporators are Sterling Newell, Donald McBride, C. C. Owens, Ellis R. Diehm and Harold T. Clark, all of Cleveland, O.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

ripped block and sheet asphalt, all on concrete base, streets listed in following contract, No. 61: East Falls Ave., from Stiles St. to Aliceanna St.; Eastern Ave., from East Falls Ave. to Broadway; two driveways into sewerage pumping station; sheet asphalt, 13,350 sq. yds.; vitrified block, 2330 sq. yds.; granite block, 3050 sq. yds.; certified check, \$1300. Specifications and proposal sheets obtainable upon application to office of Commission; deposit of \$5 for specifications covering contract. Plans and profiles on file in office of consulting engineer.

Paving.—L. H. Baker, Secy.-Treas., Shreveport, La.—Bids until Sept. 8 for paving 30-ft. alley, about 2500 sq. yds.; plans and specifications in office City Engr.

Pipe.—Swan Machinery Co., 124 E. 4th St., Joplin, Mo.—Carload of pipe, sizes up to 6 in.

Piping.—M. W. Purnell, City Clerk, Clarksdale, Miss.—Bids Sept. 2 for furnishing (f. o. b. Clarksdale) 58 pieces class "B" cast-iron water pipe (hub and spigot pattern) and a few specials.

Plumbing.—L. H. Phetteplace, Erwin, Tenn.—Prices on plumbing for \$17,000 mercantile building.

Plumbing.—J. W. Berry, chairman Jefferson County Fiscal Court, Louisville, Ky.—Bids until Sept. 2 to furnish material and plumbing in two new bank cells in jail; E. W. Hillerich, architect, 306 Coleman Bldg.

Portable Houses.—Danville Fair Association, I. P. Moore, Secy., Danville, Va.—Addresses of makers of portable houses.

Pulleys and Shafting.—Ethel Cotton Mills, Selma, N. C.—Pulleys and shafting for cotton factory.

Rails.—McEwen Lumber Co., Azalea, N. C.—Quotations on (new) 35 or 40-lb. relaying rail.

Railroad Spikes.—Raleigh Iron Works Co., Raleigh, N. C.—Prices on railroad spikes, delivered.

Razor Blades.—No. 1354, care Manufacturers Record, Baltimore, Md.—Correspondence relative to manufacture of safety razor blades.

Refrigerating Machinery.—J. W. Bell, West Main St., Spartanburg, S. C.—Information relative to cold-storage plant and prices on equipment.

Refrigerating Machinery.—A. J. MacDonald, Lakeland Dairy Farm, Lakeland, Fla.—Prices on (home) refrigerating machinery.

Reservoir.—City of Goldsboro, N. C., John R. Higgins, Mayor.—Bids until Sept. 9 for building concrete reservoir; 1,500,000 gals. capacity; reinforced concrete cover; 2500 cu. yds. excavation, 300 cu. yds. plain concrete and 90 cu. yds. reinforced concrete; plans at offices of Mayor and Gilbert C. White, engineer, Charlotte, N. C.

Road Construction.—Road Directors, Allegany County, Clinton Uhl, chairman, Cumberland, Md.—Bids until Aug. 30 for building road between Midland and Lonaconing, Md., distance .71 mile; blank forms, proposals, etc., furnished on application to State Roads Commission, Garrett Bldg., Baltimore.

Road Construction.—Baltimore County Commissioners, E. Stanton Bosley, Secy., Towson, Md.—Bids until Sept. 11 to construct portion State-aid highway along old Court Rd. between Falls Rd. and Green Spring Ave., distance .32 mile; plans and specifications and blank forms proposals obtainable at office State Roads Commission, Garrett Bldg., Baltimore.

Road Construction, etc.—States Road Commission, William L. Marcy, Secy., 601 Garrett Bldg., Baltimore, Md.—Bids until Sept. 10 for building three sections State highway, 4.65 miles, and bridge; Prince George's county, reinforced concrete bridge across Eastern Run; Harford county, between Grafton Shops and Jarrettsville, 1 mile (macadam or concrete); Caroline county, between Dover Bridge and Linchester, 1.53 miles, and between Denton and Federalburg, 1.53 miles (macadam or concrete); plans in book of specifications furnished for \$2; blueprints, each section, furnished at rate 25 cents per one-half mile.

Road Machinery.—Sam Baker, Box 833, Richmond, Va.—10-ton roller; could use good second-hand machine. Send information.

Road Machinery.—Norton Construction Co., Norton, Va.—Light steam or gasoline road roller; 5 to 7 tons; tandem or 3 wheels; second-hand.

Roofing, Copper Gutters, etc.—Department of Justice, office of R. V. La Dow, Supt. Prisons, Washington, D. C.—Bids until Sept. 25 for furnishing and delivering at United States Penitentiary, Atlanta, Ga.,

roofing slate, copper gutters, down spouts, ventilators, etc., for hospital building, in accordance with specifications, copies of which, with information, are obtainable at this office.

Sawing and Polishing Machinery.—Marshall Haney, mining engineer, Bridge-water, Va.—Prices on machinery for sawing and polishing onyx.

Screens.—De Soto Hotel, W. L. Parker, Mgr., Tampa, Fla.—Prices on screens for hotel.

Seating.—A. R. Rosenberger, First National Bank Bldg., Harrisonburg, Va.—Addresses of manufacturers relative to placing contract for 800 to 1000 chairs for theater.

Sewer Construction.—Sewer Dept., St. Louis, Mo.—Bids, opened Sept. 12, to construct Glaise Creek Joint District sewer, third section; brick sewers 10 ft. to 5 ft. inside diam., 7344 ft. in length; estimated cost \$162,000; plans and specifications at office of C. A. Moreno, Sewer Commissioner.

Sewer Construction.—Sewer Dept., St. Louis, Mo.—Bids, opened Sept. 5, to construct Glaise Creek Joint District sewer, second section; reinforced concrete sewers 16 ft. by 11 ft. 7 in. to 12 ft. by 8 ft. 6 in. inside diam.; 3559 ft. in length; estimated cost \$180,000; plans and specifications at office of C. A. Moreno, Sewer Commissioner.

Sewers.—Executive Board of Charlotte, N. C., A. H. Wearn, clerk.—Bids until Aug. 27 to construct 840 ft. 8-in. sewer, with necessary manholes and flush tanks; Joseph Firth, City Engr.

Sewers.—City Council, Asa Montgomery, clerk, Coalgate, Okla.—Bids until Aug. 27 to construct sanitary sewers; total length, 9105 lin. ft. straight 8 in. and 15-in. pipe; earth excavation, 5568 cu. yds.; rock excavation, 336 cu. yds.; 19 manholes; 2 lamp holes; number of yds., 146.

Sewers.—Board of Commissioners, L. A. Pollock, Commissioner Streets, etc., Huntington, W. Va.—Bids until Sept. 5 to construct sewers in portions of 14th and Jefferson Sts., and several alleys aggregating 7021 lin. ft. 12-in., 590 lin. ft. 10-in., 1099 lin. ft. 24-in. and 496 lin. ft. 18-in. the sewers; plans, etc., at office of A. P. Maupin, City Engr.

Soot Cleaners.—Navy Department, Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-General, Washington, D. C.—Bids Sept. 23 for furnishing and installing 7 soot cleaners on boilers, schedule 3512; delivery Navy-yard, Washington. For schedule apply to navy pay office nearest navy-yard.

Shafting and Pulleys.—See "Steel, etc."

Steel, etc.—Don A. Radle, Oklahoma Threshing Machine Co., 628 W. 2d St., Oklahoma City, Okla.—Angle, channel and galvanized sheet metal; bar steel; pulleys, shafting and belting.

Structural Steel.—Isthmian Canal Commission, F. C. Boggs, Maj., General Purchasing Officer, Washington, D. C.—Proposals until Sept. 2 for structural steel for substations of transmission system. Blanks and general information relating to this circular (No. 791) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York, and 614 Whitney-Central Bldg., New Orleans; also from U. S. Engineer offices in Baltimore, Philadelphia, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo., and Chamber of Commerce, Quincy, Ill.

Structural Steel.—Isthmian Canal Commission, F. C. Boggs, Maj., General Purchasing Officer, Washington, D. C.—Bids until Sept. 6 to furnish and erect structural steel work for shops and office building, Balboa. Blanks and general information relating to this circular (No. 790) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York, and 614 Whitney-Central Bldg., New Orleans; also from U. S. Engineer offices in Baltimore, Philadelphia, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo., and Chamber of Commerce, Quincy, Ill.

Washers (Steel).—Gray Bros. Excelsior Co., Woodford, Va.—Steel spring or lock washers; 3/4 in. diam., 1/2 in. hole, about 1-1/2 in. thick.

Water-works Materials.—City Council, Scottsboro, Ala.—Proposals until August 28 for following f. o. b. cars Scottsboro: 3350 ft. 8 in. cast-iron pipe; 1500 ft. 6 in. cast-iron pipe; 13,300 ft. 4 in. cast-iron pipe; all class "B"; 3 tons specials; 13 standard double nozzle hydrants; five 8 in. four 6 in. and one 4 in. H. E. gate valves and boxes;

14,000 lbs. pig lead; 550 lbs. W. M. jute; 17,050 ft. 1 1/2-in. galvanized pipe; 3300 ft. 2-in. galvanized pipe; 350 galvanized fittings; 16 1/2-in. screw gate valves and boxes, 18-in. cover; 17,863 lbs. 1/2-in. and 3/4-in. R. C. steel bars; 200 bbls. Portland cement; 75 yds. sand; 135 yds. stone or gravel; 10,000 ft. form lumber; specifications furnished by W. C. Maples, City Clerk, or by J. B. McCrary, Co., engineer, 1406 Third National Bank Bldg., Atlanta, Ga.

Water Meters.—M. W. Purnell, City Clerk, Clarksdale, Miss.—Bids Sept. 2 for furnishing (f. o. b. Clarksdale) 12 water meters, disc type, 1/2-in. size, 1/2-in. connections.

Water System (Isolated).—A. J. MacDonald, Lakeland Dairy Farm, Lakeland, Fla.—Interested in water supply system.

Water-works Construction.—City of Maryville, Tenn., Samuel Everett, Mayor.—Correspondence relative to installation of water-works.

Water-works Construction.—City of Moline, Kans.—Bids Sept. 3 to construct well, underground reservoir and galleries, per plans and specifications in offices of City Clerk and of Benham Engineering Co., consulting engineer, Oklahoma City, Okla.

Water-works.—City Council, Belton, Tex.—Bids until Sept. 1 to construct water-works, including surfaced concrete reservoir or pumping basin, 40x15x20 ft. (excavation by city), brick and concrete pump-house, 61x27 1/2 ft., lay 18,500 ft. 4-in. cast-iron water mains, specials, about 350 lbs. hemp, 1200 lbs. soft pig lead, 40 gate valves and extension valve boxes and 30 fire hydrants; plans and specifications at office of C. E. Leonard, engineer, Belton.

Wire Cloth.—Baker & Holmes Co., Jacksonville, Fla.—Mesh wire cloth, 1/4 in., for plastering; quotations from manufacturers.

Woodworking Machinery.—See "Excelsior Machinery, etc."

The Southern Rice Growers' Milling Association has been organized by rice farmers of Arkansas, Louisiana and Texas with \$2,000,000 capital.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,

Baltimore, Md., August 27.

The Baltimore stock market was dull during the past week. In the trading United Railways common sold from 27 1/2 to 27 3/4; do. income bonds, 62 1/2 to 63 1/2; do. funding 5s, 87 to 86; do. notes, 109 to 108; do. 4s, 83 1/2 to 83; Consolidated Gas, Electric Light & Power common, 108 to 108 1/2; do. preferred, 111; do. 4 1/2s, 87 1/4; Seaboard Air Line preferred, 45 1/2 to 45; Mt. Vernon-Woodberry Cotton Duck 5s, 68 1/4; G. B. S. Brewing common, 3; do. income bonds, 7 1/2 to 8; do. 4s, 43 1/4 to 43 1/2, with last sale at 44.

Citizens' Bank stock sold at 43; Merchants-Mechanics' Bank, 32 3/4 to 33; Maryland Casualty, 96; Fidelity & Deposit, 130 to 130; Munsey Trust, 100; United States Fidelity, 192.

Other securities were traded in thus: Fairmont & Clarksburg Traction 5s, 99 1/4; Northern Central Railway stock, 116; Pennsylvania Water & Power common, 71 1/2 to 72 1/4, with last sale at 70 1/4; Baltimore, Sparrows Point & Chesapeake 4 1/2s, 94 1/4 to 95; Maryland Electric 5s, 97; Atlantic Coast Line of Connecticut 5s, certificates, 100; Macon Railway & Light 5s, 96 1/2; Norfolk Railway & Light common, 25; Alabama Company common, 7 1/4; Baltimore City 5s, 1916, 101 1/4; City & Suburban (Washington) 5s, 100 1/4 to 100 1/2; Anacostia & Potomac 5s, 98 3/4 to 98 1/2; Detroit United 4 1/2s, 69 to 69 1/4; Pennsylvania Water & Power 5s, 91 to 90 1/2; Consolidation Coal convertible 5s, 100 1/2 to 99 1/2; Western Maryland 4s, 80; Houston Oil common, trust certificates, 16 1/2 to 17; do. preferred, trust certificates, 37 to 37 1/2; Baltimore & Ohio convertible 4 1/2s, 92 1/4; Chicago Railways 5s, 98 1/4; South Bound 5s, 103; Wilmington & Weldon 5s, 104 1/4 to 105; Consolidation Coal common, 94 1/2; Norfolk Street Railway 5s, 102 1/4; Virginia Railway & Power 5s, 93; Baltimore Electric 5s, stamped, 98; Milwaukee refunding 4 1/2s, 89 3/4; Norfolk & Atlantic Terminal 5s, 93 1/4; Atlantic Coast Line convertible debenture 4s, 93 1/2 to 91 1/4; Fairmont Coal 5s, 93 1/4; Arundel Sand & Gravel 6s, 98.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended August 27, 1913.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast Line.....	100	121	121
At. Coast of Conn.....	100	257 1/2	259
Augusta & Alton Pfd.....	100	70	70
Ch. Sou. & Fla.....	100	31	31
Ch. Sou. & Fla. 1st Pfd.....	100	80	80
Maryland & Penna.....	100	25	45
Norfolk Ry. & Lt.....	25	25	25
Seaboard Air Line Com.....	100	19	20
Seaboard Air Line Pfd.....	100	45	46
United Ry. & Elec. Co.....	50	27	27 1/2

Bank Stocks.	Par.	Bid.	Asked.
Drovers & Mechanics.....	100	210	240
Farmers & Merchants.....	40	46	47 1/2
Merchants-Mechanics.....	10	19	23
Bank of Baltimore.....	100	178	183
Bank of Commerce.....	15	29	29
Exchange.....	100	159	160
Union.....	100	135	140

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Continental Trust.....	100	199	200
Equitable Mtge. & Trust.....	100	120	120
Fidelity & Deposit.....	50	158 1/2	160
Maryland Casualty.....	25	98	98
Munsey Trust.....	100	100	100
More Trust & Dep.....	50	60	60
U. S. Fidelity & Guar.....	100	190	198

Miscellaneous Stocks.	Par.	Bid.	Asked.
Alabama Co.....	100	7	8
Baltimore Elec. Pfd.....	50	93 1/2	94
Ch. Gas, Elec. Lt. & P. Com.....	100	108	112
Ch. Gas, Elec. Lt. & P. Pfd.....	100	110	112 1/2
Canton Company.....	100	170	170
Consolidation Coal.....	100	94	95 1/2
G. B. S. Brewing Co.....	100	2 1/2	3

Railroad Bonds.	Par.	Bid.	Asked.
Alabama Midland 5s.....	102	104	104
At. Coast Conv. Deben. 4s.....	93 1/2	94	94
At. Coast Comm. 4s, Cfs., 5-20s.....	87	80	80 1/2
At. Coast Comm. 5s, Cfs., tr. 4s.....	88	89	89 1/2
At. Coast-L. & N. col. tr. 4s.....	87	87	87
Carolina Central 4s.....	89	91 1/4	91 1/4
Coal & Coke Ry. 5s.....	102 1/4	102 1/4	102 1/4
Georgia & Alabama 5s.....	102	102	102
Ch. Car. & North. 1st 5s.....	49 1/2	49 1/2	49 1/2
Maryland & Penna. Inc. 4s.....	100 1/2	100 1/2	100 1/2
New Orleans M. & C. 5s.....	100 1/2	100 1/2	100 1/2
Potomac Valley 1st 5s.....	100 1/2	100 1/2	100 1/2
Sav. Fla. & West. 5s.....	100 1/2	100 1/2	100 1/2
South Bound 5s.....	102 1/2	101	101
Wilmington & Weldon 5s.....	105	105	105
Wash., Balt. & An. 5s.....	83 1/4	85	85

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s.....	98 1/4	98 1/4	98 1/4
Anacostia & Potomac 5s, Gtd.....	90	90	90
Balt. Tracton (North Balto.) 5s.....	94 1/2	94 1/2	94 1/2
Balt. Tracton (North Balto.) 5s.....	102	104	104
Central Ry. (Balto.) Con. 5s.....	100 1/2	100 1/2	100 1/2
Charleston City Ry 5s.....	100 1/2	100 1/2	100 1/2
Charleston Con. Elec. 5s.....	101 1/4	101 1/4	101 1/4
City & Suburban 5s (Balto.).....	100 1/2	100 1/2	100 1/2
City & Suburban 5s (Wash.).....	100 1/2	100 1/2	100 1/2
Danville Traction 5s.....	92 1/2	94	94
Fair & Clarks, Traction 5s.....	90	100 1/4	100 1/4
Knoxville Traction 5s.....	100 1/2	101 1/4	101 1/4
Macon Ry. & Lt. 5s.....	86 1/4	86 1/4	86 1/4
Maryland Elec. Ry. 5s.....	97	97 1/2	97 1/2
Memphis Street Railway 5s.....	96 1/4	97	97
Monongahela Val. Trac. 5s.....	98	92 1/4	92 1/4
Newport News & Old Point 5s.....	98	100	100
Norfolk & Portsmouth Trac. 5s.....	87 1/4	88 1/4	88 1/4
Norfolk Railway & Light 5s.....	98 1/4	98 1/4	98 1/4
Norfolk Street Railway 5s.....	102 1/2	103	103
Norfolk & Atlantic Ter. 5s.....	93	92 1/4	92 1/4
United Railways 1st 4s.....	82 1/2	83 1/4	83 1/4
United Railways Income 4s.....	63 1/4	63 1/2	63 1/2
United Railways Funding 5s.....	65 1/4	65 1/4	65 1/4
United Railways notes.....	108 1/2	108 1/2	108 1/2
Virginia Railway & Power 5s.....	93	93 1/4	93 1/4

Miscellaneous Bonds.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron 5s.....	70	73	73
Baltimore Electric 5s, Sp.....	98	98 1/4	98 1/4
Consolidated Gas 5s.....	103	104	104
Consolidated Gas 4 1/2s.....	92 1/4	92 1/4	92 1/4
Consolidation Coal 6s.....	99 1/4	100	100
Consolidation Coal Refd. 5s.....	87	87	87
Con. Gas, Elec. Lt. & P. 4 1/2s.....	87	87	87
Fairmont Coal 1st 5s.....	93 1/4	93 1/4	93 1/4
G. B. S. Brewing 1st 4s.....	44	44 1/4	44 1/4
G. B. S. Brewing Inc. 5s.....	75	81 1/2	81 1/2
Mt. Vernon-Woodberry Cot. Duck 5s.....	68 1/4	68 1/4	68 1/4
Jamison Coal & Coke 5s.....	89 1/2	92	92
Pa. Water & Power 5s.....	90 1/2	90 1/2	90 1/2
St. Joseph R. L. H. & P. 5s.....	98	98	98

FINANCIAL CORPORATIONS.

Ala., Boaz.—Approved: First National Bank; capital \$30,000. Organizers: W. H. Bartlett, A. E. Archer, W. E. Noel, W. T. Gillespie and R. E. Boroughs.

Ala., New Brockton.—First National Bank, capital \$35,000, has made application to organize. Petitioners: W. C. Jones, J. E. Jones, L. H. Sessions, M. P. Adams, H. M. Sessions, J. L. Brock.

Ark., Bearden.—Farmers and Merchants' Bank begun business. T. S. Payne is cashier.

Fla., Gainesville.—Phifer State Bank organizing; capital \$50,000; offices will be in Phifer Bldg., Main and Union Sts.

Fla., St. Petersburg.—Florida Bank & Trust Co. chartered, capital \$50,000, surplus \$12,500. A. C. Odom, Jr., Pres.; A. Norwood, V.-P.; H. D. Edwards, Treas. and Cashier; Edmund C. Wimer, Secy. Business to begin about Oct. 1. Offices: Home Security Co.'s Bldg.

Fla., Tarpon Springs.—West Coast Abstract Co. has applied for charter; capital \$25,000. Stockholders: L. S. Fernald, J. C. Beckman, W. W. K. Decker and John K. Cheyne.

Ga., Albany.—Farmers and Merchants'

Merchants-Mechanics National Bank

South and Water Sts., BALTIMORE, MD.
DOUGLAS H. THOMAS, President.
JNO. B. RAMSAY, V.-P. and Chm. Bd. of Dir.
WM. INGLE, Vice-President.
JOHN B. H. DUNN, Cashier.
Capital \$2,000,000 Deposits \$21,670,000
Surplus and Profits \$2,175,000

Accounts of Banks, Bankers, Corporations and Individuals solicited.

We invite correspondence.

The First National Bank

OF KEY WEST, FLA.
United States Depository and Disbursing Agent
Capital - - - - \$100,000
Surplus and Undivided Profits - - - 40,000
A general banking business transacted.
Special attention given to collections.

INVESTMENT SECURITIES

Southern Stocks and Bonds
Municipal and Corporation
Cotton Mill Stock a Specialty
WM. S. GLENN, Broker, SPARTANBURG, S. C.

JOHN NUVEEN & CO.

First National Bank Building
CHICAGO
We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
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Wilmington, Delaware
INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.
BANKING AND TRUST department gives special attention to out of town customers' accounts.

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REALTY DEPARTMENT has sites for manufacturing industries. Modern Methods of management of property.

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WM. G. TAYLOR, Vice-Pres. and Treasurer.
HARRY W. DAVIS, Vice-Pres. and Secretary.
W. W. PUSEY 2d, Title and Real Estate Officer.

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ELMER L. HATTER, C. P. A., Treasurer
ERNEST E. WOODEN, C. P. A., Secretary

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NEWPORT NEWS, VA.

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Wm. S. Hammond, Cashier
Saml. W. Tschudi, A. Cash. R. E. Bolling, A. Cash.

The First National Bank

17 South St., Baltimore, Md.
Capital - - - - \$1,000,000
Surplus and Net Profits - - - 400,000
Deposits - - - - 6,500,000

Especially well equipped to handle the business of Southern Banks, Corporations, and Individuals and Manufacturers. We cordially invite correspondence and interviews.

The National Exchange Bank

OF BALTIMORE, MD.
Hopkins Place, German and Liberty Streets
Capital, \$1,000,000
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SUMMERFIELD BALDWIN, Vice-Pres.
R. VINTON LANSDALE, Cashier.
C. G. MORGAN, Asst. Cashier.
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited

Edwin Warfield, President

Fidelity and Deposit Company of Maryland

Home Office: Baltimore

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Certified Public Accountant. WASHINGTON, D. C.

Securities Corporation General

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111 Broadway, New York

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\$10,000,000

Issued
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Finances public service enterprises.

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W. H. SHARP, Vice-President
G. W. ROBERTSON, Vice-President
J. K. TRIMBLE, Sec'y & Treas.

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ALEXANDER J. HEMPHILL, New York
HOWARD A. LOEB, Philadelphia
S. Z. MITCHELL, New York
FERGUS REID, Norfolk, Va.
GEO. W. ROBERTSON, Shamokin, Pa.

F. W. ROEBLING, Jr., Trenton, N. J.
W. H. SHARP, Philadelphia
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J. C. WHITE, New York
P. M. CHANDLER, Philadelphia
F. T. CHANDLER, Philadelphia

**Palmetto National Bank**

COLUMBIA, S. C.

Capital
\$250,000.00

Deposits
\$2,700,000.00

Surplus and Profits
\$150,000.00

WILIE JONES, President
JOHN JACOB SEIBELS,
Vice-President
THOMAS TAYLOR,
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Surplus - - - - \$3,000,000

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Bank organizing; capital \$25,000; G. R. Battle and others.

Ky., Louisville.—The United Bank & Trust Co. organized; capital \$250,000. Incorporators: Clarence LeBus, O. L. Ballinger, Ed. C. O'Rear, E. J. O'Brien, Jr., C. W. Banta, T. P. Satterwhite, J. W. Vaughn, E. A. Hale, F. W. O'Brian, D. M. DeRidder, E. C. Frankie, George C. Turner, H. W. Embry, N. W. Embry and others.

Ky., Whitesburg.—First National Bank, capital \$25,000, open for business; Dr. John D. Fitzpatrick, Pres.; W. H. Courtney, Winchester, Cash.

La., New Orleans.—The Fidelity Development & Investment Co. organizing; capital \$100,000. Organizers: William H. Heyl, Ernest J. Coulon, J. Wilfred Galdry, Fred. H. Dienes, Frank W. Hart and Gustaf R. Westfeldt, Jr.

Miss., Brooksville.—Cotton Exchange Bank will ask charter; capital \$25,000. Organizers: C. L. Allen, P. H. Adams and others.

Miss., Heidelberg.—Organized: Bank of Heidelberg; capital \$15,000. Directors: E. J. Dunn of Mathiston, Miss., Pres.; W. L. Elkins, Cashier; S. W. Abney, M. G. Travis and L. B. Ellis. Business begun.

Mo., St. Louis.—Central States Trust Co. recently organized; capital \$200,000; Ashley Cabell, Pres.; G. F. Moore, V.-P.; F. E. Bryan, Secy.-Treas.

N. C., Pilot Mountain.—People's Bank, authorized capital \$50,000, paid in \$10,000, organized; Succeeds Surry County Loan & Trust Co.; Geo. D. Paucette, Mt. Airy, Pres.; J. W. McKinney, Pilot Mountain, Cashier. Business to begin in Sept.

Okla., Alva.—Chartered: Central State Bank; capital \$25,000. Incorporators: E. Anderson, T. F. Fennessey, G. A. Harbaugh and H. E. Noble.

S. C., Aiken.—Chartered: New South Investment Co.; capital \$15,000. Business begins September 1. Organizers: P. S. Norris, J. A. Seligler, M. E. Seligler.

Okla., Bixby.—Chartered: First National Bank, capital \$25,000; H. Lytal, Pres.; Downey Millburn, Cash.

S. C., Columbia.—The Columbia Guaranty Title & Trust Co. granted commission; capital \$25,000; petitioners, William A. Arthur and William A. Clarkson.

S. C., Florence.—City Savings Bank, cor. Evans and Church Sts., incorporated; began business Aug. 15; capital \$25,000. Incorporators: J. Charles E. Commander, Pres.; J. F. Stackley and H. A. Smith; D. J. Winn, Jr., Cashier.

S. C., Georgetown.—Commissioned: Farmers & Merchants' Bank; capital \$25,000. Petitioners: J. H. Fraser, H. B. Springs, I. M. Carroway and C. G. Barre.

Tenn., Chapel Hill.—Organized: Citizens' Bank; capital \$15,000; W. G. Orme, Pres.; J. J. Shaw, First V.-P.; J. T. Ferguson, Second V.-P., and A. B. Vantrease, Cashier.

Tenn., Ripley.—Chartered: First National Bank; capital \$25,000; G. M. Partee, W. R. Miller, V. P. Morriarity, H. D. Folts, W. Tucker, Jr., and J. E. Pierson, organizers.

Tenn., Trigg City.—Organized: A new bank; capital \$15,000; directors, J. W. Holly, Pres.; W. W. Collins, J. J. Clark, Oliver Wolaver and D. B. Clayton.

Tex., Fort Worth.—Southern Cooperative Life Insurance Co. of Fort Worth organized. D. M. Doyle, Fort Worth, Pres.; A. L. Houston, Arlington, V.-P.; G. T. Bludworth, Fort Worth, Secy.; C. M. Mitchell, Arlington, Treas.; W. M. Conner, Fort Worth, business manager.

Tex., Whitehouse.—Chartered: Guaranty State Bank; capital \$10,000; C. H. Willingham, Pres.; J. J. McCutcheon, Cashier.

Va., Glasgow.—Bank of Glasgow organized; capital \$10,000; surplus \$2500; B. E. Vaughan, Pres.; B. G. Baldwin, V.-P.; R. G. Paxton, Cash. Business began Aug. 26.

Va., Richmond.—Southern Guaranty & Mortgage Corporation; capital \$1000 to \$250,000. Organizers: James J. Carroll, Pres.; Richard H. Hollen, Secy.; T. J. Neelle and John A. Massen, all of Chicago.

W. Va., Jarrolds Valley.—First National Bank approved; capital \$25,000. Organizers: Quince Jones, R. E. Barrett, P. J. Kilner, J. A. Barrett and C. O. Jarrell.

NEW SECURITIES.

Ala., Birmingham.—Election called Sept. 15 to vote on auditorium bonds. Address Finance Commissioners.

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ALABAMA

Ala., Chanton.—City will vote in near future on \$40,000 5 per cent. 30-year sewer and water-works bonds; denomination \$100, \$500, \$1000; Dr. E. A. Matthews, Mayor.

Ala., Demopolis.—Jesse B. Hearn, Mayor, opens bids August 28 for \$20,000 6 per cent. 10-year school bonds voted August 4; denomination \$1000; dated August 28, 1913; maturity August, 1923.

Ala., Evergreen.—Conceh County Commissioners' Court will authorize issue of \$50,000 5 per cent. 30-year road bonds Sept. 15, 1913. F. J. Dean, Judge of Probate.

Ala., Mobile.—Bids received Aug. 29 for \$150,000 5 per cent. 30-year school bonds rejected. Laz Schwartz is Mayor.

Ala., Rockford.—Coosa county will vote Oct. 6 on \$75,000 of road bonds. Address County Commissioners.

Ala., Tuscaloosa.—Election Sept. 15 on \$25,000 park and boulevard, \$5000 fire engine and \$5000 garbage disposal plant bonds, 5 per cents, 30-year; denomination \$1000. J. V. Jones is City Clerk.

Ark., Lonoke.—William R. Compton Co., St. Louis, purchased recently \$120,000 6 per cent. bonds Road District No. 2, Lonoke county, dated Aug. 1, 1913; denomination \$1000; maturity Aug. 1, 1914, to 1933, inclusive. Address County Commissioners.

Fla., Arcadia.—Election is to be held to vote on \$75,000 school bonds. Address The Mayor.

Fla., Arcadia.—De Sota county will vote Aug. 30 on \$20,000 5 per cent. 30-year school bonds. Address County Commissioners.

Fla., Bonifay.—Holmes county reported contemplating issue \$40,000 road bonds. Address County Clerk.

Fla., Dunnellon.—Voted: \$12,000 school district bonds. Address School Commissioners.

Fla., Newberry.—Sept. 1 election will be held to vote on \$30,000 of water and light bonds. Address The Mayor.

Fla., Fernandina.—Voted: \$60,000 municipal ice works and docks bonds. Address The Mayor.

Fla., Hastings.—W. R. Byrd, Town Clerk, will receive bids for private sale of \$10,000 5 per cent. 20-year paving, sewer and fire-protection bonds.

Fla., Ocala.—Voted: \$75,000 of school building bonds previously noted. Address School Commissioners.

Fla., Orlando.—Voted: \$100,000 5 per cent. 30-year street-paving bonds; denomination \$500; W. H. Reynolds, Mayor.

Fla., St. Petersburg.—Oct. 7 city will vote on \$227,050 of bonds as follows: Water-front, \$43,500; reservoir park, \$15,000; bayboro harbor, \$41,500; incinerator, \$20,000; woman's building, \$7400; paving, \$20,500; water-works, \$41,000; fire department, \$11,000; redemption of revenue bonds, \$26,500. Address City Commissioners.

Fla., Starke.—Reported sold at a premium to Chicago parties: \$30,000 school building bonds, 6 per cent., 10 year. Previously noted.

Fla., St. Petersburg.—Election contemplated \$40,000 water-works improvement bonds. Address Finance Commissioners.

Fla., Tallahassee.—Bids received until noon Sept. 11 for \$32,000 additional street paving, \$1000 water mains and \$9000 light and water 5 per cent. 50-year bonds. Denomination \$1000. Dated Aug. 1, 1913. A. H. Williams, City Clerk. Further particulars will be found in the advertising columns.

Fla., Wildwood.—Bids opened Sept. 22 for \$10,000 6 per cent. 50-year school district bonds voted Aug. 12, 1913; denomination \$100. Address G. H. Tompkins.

Ga., Austell.—Election August 27 on following 6 per cent. bonds: \$12,000 water-works, maturity January 1, 1915 to 1926; \$8000 sewer, maturity \$1000, January 1, 1927 to 1934; \$5000 street improvement, maturity \$1000, January 1, 1935 to 1939; denomination \$1000. Address The Mayor.

Ga., Blackshear.—City offers for sale \$15,000 5 per cent. bonds dated July 1, 1913; denomination \$500; maturity, one bond each year

beginning July 1, 1914. M. C. McAlpin is City Clerk.

Ga., Cartersville.—Reported voted: \$100,000 5 per cent. city improvement bonds previously noted. G. W. Young is Mayor.

Ga., Columbus.—\$450,000 water-works; bonds to be voted October 15 are 1-30-year 5 per cents. Address The Mayor.

Ga., Moultrie.—Colquitt county will soon vote on \$400,000 bridge and culvert bonds. Address County Clerk.

Ga., Savannah.—Council finance committee will sell \$600,000 drainage bonds.

Ga., Whigham.—Voted July 15, validated Aug. 23: \$6000 electric-light and \$3000 water-works 6 per cent. bonds; denomination \$375 and \$125; maturity 1933. Address Mayor and Aldermen.

Ky., Anchorage.—Election is to be held in November to vote on \$25,000 water-works bonds. Address Town Board.

La., Alexandria.—Voted: Following 5 per cent. 40-year bonds: sewer extension and improvement, \$22,000; street paving and drainage, \$14,000; water-works improvement, \$4000. W. W. Whittington, Jr., is Mayor.

La., Gretna.—Bids received until noon Sept. 3 for \$100,000 5 per cent. improvement bonds, districts Nos. 1 and 2, Jefferson parish. Address secretary, Police Jury, Gretna. F. L. St. Martin is president.

La., Lafayette.—Defeated: \$100,000 drainage bonds. Address The Mayor.

La., New Orleans.—City proposes to issue \$5,000,000 of cotton warehouse bonds. Address Board of Commissioners, Port of New Orleans.

La., Opelousas.—H. D. Larcade, Jr., local agent for Hoehler & Cummings, Toledo, O., purchased \$33,000 of 5 per cent. street-paving bonds. Address The Mayor.

La., Ville Platte.—Voted: Water-works bonds. Address The Mayor.

Md., Denton.—Nelson, Cook & Co. and Baker, Watts & Co. jointly have been awarded \$25,000 of 5 per cent. 20-year Caroline county improvement bonds. Address County Clerk.

Md., Kensington.—Sewerage system bonds are to be issued. Address Town Clerk.

Miss., Waynesboro.—Board of Supervisors Wayne County ordered issue of \$100,000 road and \$2500 school bonds.

Mo., Cartersville.—Little & Hayes, St. Louis, have purchased at \$125 premium \$12,000 of 6 per cent. city hall bonds; denomination \$1000. Address The Mayor.

Mo., Chillicothe.—Aug. 27 election to vote on \$22,300 school bonds. Address School Commissioners.

Mo., Joplin.—Election called Aug. 26 on \$175,000 park and boulevard bonds is cancelled. Address The Mayor.

Mo., Kansas City.—Bids received by E. J. McDonnell, Secy. Board of Public Works, until 2 P. M. Sept. 16 for \$75,421.95 6 per cent. 12th St. condemnation fund certificates; dated April 15, 1913; denomination \$1000; one \$421.95; maturity July 1, 1914 to 1933.

Mo., Maryville.—Voted: \$50,000 Polk Township, Modway county, road bonds. Address Town Clerk.

Mo., Pittsburg.—Sept. 23 city will vote on \$22,000 of school, \$12,000 fire department and \$6000 park bonds. Address City Commissioners.

Mo., Tusculum.—Bank of Eldon, Eldon, Mo., awarded \$10,000 5 per cent. 60-year Miller county courthouse bonds at par.

N. C., Charlotte.—Bids received Aug. 29 for \$110,000 4½ per cent. 30-year Mecklenburg county improvement bonds rejected. W. M. Long is chairman Board County Commissioners.

N. C., Elkin.—Voted: \$30,000 water and sewerage bonds. C. G. Armfield, Mayor.

N. C., Mt. Airy Township.—First National Bank and Bank of Mt. Airy purchased \$80,000 5 per cent. 30-year road bonds. Address Town Clerk.

N. C., Snow Hill.—Voted Aug. 12: \$60,000 Greene county township road bonds. Address J. O. Sugg, Reg. Deeds.

N. C., Spencer.—John J. George, representing Sydney Spitzer & Co., Toledo, has purchased at a premium \$60,000 of 6 per cent. 30-year water, light and school bonds. C. G. Thieling is Mayor.

N. C., Wilson.—Voted: \$30,000 railroad aid bonds. Address The Mayor.

N. C., Wilmington.—Bids received August 18 for \$50,000 road and \$75,000 school 4½ per cent. 25-year bonds rejected by County Commissioners. New bids asked until 3.30 P. M. Aug. 25; interest changed to 5 per cent.

Okla., Coalgate.—Voted: \$35,000 sewer and \$5000 park bonds. Address The Mayor.

S. C., Spartanburg.—Voted: \$100,000 4½

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WITH its endowment of over two and a half million dollars, it can limit its enrollment to boys of high character. It has a faculty of unusual strength and size. It has created an unique type of school life. It can give much individual attention through its special tutors. Its graduates take high honors in the leading colleges and technical schools. Each boy has his own room.

It has the most beautiful school buildings and grounds in America.

It has one hundred and seventy-five acres, on which are a nine-hole golf course, five athletic fields, swimming pool, quarter-mile cinder track, tennis courts and batting cage.

Its tuition of \$700 would have to be fifty per cent. greater were it not for its endowment.

The LOWER SCHOOL FOR LITTLE BOYS offers all the advantages of the Upper Forms with the special benefit of a separate dormitory and a separate organization.

Illustrated Book on Request.

THOMAS STOCKHAM BAKER, Ph.D., Director,

Port Deposit, Maryland.

per cent. street and sidewalk improvement bonds. Address The Mayor.

S. C., Winnsboro.—Election soon to be held to vote on \$65,000 water and sewerage bonds. Address The Mayor.

S. C., Yorkville.—People's National Bank, Rock Hill, purchased \$75,000 York county courthouse bonds voted last November. Address County Clerk.

Tenn., Alamo.—Voted Aug. 4: \$12,000 5½ per cent. 16-year school-building bonds; denomination \$500. Date for opening bids not yet decided. R. L. Thompson, Mayor.

Tenn., Charlotte.—A. B. Leach & Co., Chicago, purchased, \$650 premium, \$250,000 5 per cent. 30-year Dickson county road bonds. Address County Clerk.

Tenn., Greeneville.—Bids received any time by the Recorder for \$40,000 6 per cent. 20-year sewer bonds, voted June 2; denomination \$500.

Tenn., Knoxville.—Ordinance is prepared authorizing issue of \$30,000 improvement bonds. D. G. Leahy, Recorder.

Tenn., Memphis.—Ordinance passed providing for sale of \$315,000 6 per cent. 5-year front-foot assessment bonds, dated Oct. 1, 1913. Address The Mayor.

Tex., Angleton.—Voted: \$150,000 District No. 2, Brazoria county, road bonds. Address County Clerk.

Tex., Austin.—The Attorney-General has approved the following securities: \$300,000 5 per cent. 20-40-year reservoir bonds of Fort Worth, series 29; \$8000 5 per cent. 20-40-year bonds of Harrison county common school district No. 6; \$1300, district No. 9; \$1500, district No. 12; \$800, district No. 43; \$890, district No. 25; \$1300, district No. 18, 5 per cent. 5-20-year Nacogdoches county bonds; \$3000 district No. 71 5 per cent. 10-20-year bonds of Parker county.

Tex., Bay City.—Bids received until Sept. 13 by Commissioners' Court of Matagorda County for \$30,000 5½ per cent. 40-year bonds of Road District No. 4; denomination \$750. W. S. Holman, County Judge. Further particulars will be found in the advertising columns.

Tex., Big Springs.—Issue: \$10,000 waterworks bonds reported under consideration. Address The Mayor.

Tex., Commerce.—Voted: \$10,000 of waterworks bonds. C. J. Debenport is Mayor.

Tex., Corpus Christi.—Voted: \$30,000 garbage disposal plant bonds. Address The Mayor.

Tex., Corsicana.—Voted: \$20,000 city street-paving bonds; \$400,000 Road District No. 1 and \$75,000 Road District No. 3, 5 per cent. 40-year Navarro county bonds. Defeated: Bonds of Purdon District No. 2. Address H. D. Johnson, County Auditor.

Tex., Groveton.—Trinity county will vote Sept. 16 on \$100,000 road bonds. Address County Clerk.

Tex., Groveton.—Commonwealth Trust Co., Houston, has purchased \$50,000 courthouse and \$20,000 Road District No. 1 Trinity county 5 per cent. 40-year bonds. Address County Commissioners.

Tex., Hubbard.—Voted: \$20,000 school district bonds. Address School Commissioners.

Tex., Huntsville.—Voted: \$8500 water extension bonds. Defeated: \$25,000 sewerage bonds. Address The Mayor.

Tex., Jayton.—W. M. Morrow, Secy., Board of School Trustees, is offering for sale \$12,000 5 per cent. 10-40-year school district building bonds.

Tex., Midland.—\$50,000 5 per cent. 5-40-year Midland county road improvement bonds are offered at private sale by J. H. Knowles, County Judge.

Tex., Rockdale.—Bids received until 4 P. M. Sept. 15 for \$30,000 5 per cent. 40-year waterworks bonds; denomination \$500. Address E. A. Camp, City Attorney.

Tex., Seadrift.—Voted: Street improvement bonds. Address The Mayor.

Tex., Runge.—Aug. 27 city will vote on \$20,000 water and light bonds. Address The Mayor.

Tex., Teague.—Election Sept. 16 to vote on \$15,000 water-works improvement bonds. Address The Mayor.

Tex., Tyler.—Smith county will vote Aug. 28 on \$30,000 Bullard District road bonds. Address District Commissioners.

Tex., Wharton.—Sept. 24 city will vote on \$15,000 of sewer bonds. Address The Mayor.

Tex., West.—Sept. 20 city will vote on \$1800 of bonds. R. B. Ingraham, Mayor. Previous item gave amount as \$21,000.

Tex., Woodsboro.—Voted: \$25,000 of road bonds of Commissioners Precinct No. 2, Refugio county.

Va., Ginter Park.—Bids received until noon Sept. 10 for \$125,000 5 per cent. 35-year municipal bonds. Address John Garland Pollard, Mayor.

W. Va., Charles Town.—Defeated: \$25,000 bridge bonds. S. Moore, Clerk. Previous report stated bonds carried.

W. Va., Logan.—W. I. Campbell, County Clerk, will receive bids until noon Sept. 6 for \$80,000 5 per cent. Logan county bridge bonds; denomination \$500.

FINANCIAL NOTES.

Bank of Commerce, Lexington, Ky., has decided to increase capital from \$100,000 to \$150,000, effective Sept. 1.

The Union National Bank, Columbia, S. C., is doing business in its new quarters at the corner of Main and Gervais Sts.

Reported from Little Rock, Ark., that the England Loan & Trust Co., capitalized at \$250,000, has taken over the real estate sales department of the England Realty Co.

The Rowland Loan & Trust Co., Rowland, N. C., is offering an unsold portion of its capital stock sufficient to bring same up to \$25,000, the authorized amount; W. F. Bristow, Pres.; M. R. Wilkes, Secy-Treas.

Reports from Washington, D. C., state that control of the Union Savings Bank has been acquired by the Commercial National Bank; joint assets \$10,000,000. New officers: Ashton G. Clapham, Pres.; James A. Cahill, Tucker K. Sands, V.-P.; C. L. Bowman, Cash.

State Revenue from Forest Service.

A circular just issued by the Forest Service calls attention to the various laws under which more than a third of all national forest receipts go to the benefit of the States in which the forests are situated, for schools and roads. In 1912 the amount of money thus made available for State purposes totaled about \$750,000. The report does not show the amounts due from the receipts of the fiscal year which closed June 30, 1913. Including these, the States' share of national forest funds since the laws were passed has aggregated over \$3,000,000.

These facts are set forth, according to the forest service, because a popular impression still exists that all money received by the Government from timber sales, grazing fees, water-power permits, etc., is permanently taken out of the States where it is paid and goes into the National Treasury to meet the general expenses of the Government. This idea is said to prevail, to some extent, even among actual forest users in the national forest States, where the division of receipts with the States has been going on for years.

The circular States that part of the gross receipts of the national forests was first made available for schools and roads when the agricultural appropriation act of June 30, 1906, directed the Secretary of the Treasury to pay over to the State or territory in which any forest reserve was situated 10 per cent. of all money received during the fiscal year from such reserve. The money was to be expended by the State or Territorial Legislature for the benefit of public schools and roads in the counties in which the forest reserve lay. This legislation was recommended by the forest service because of the recognized burden imposed locally where national forests operate to prevent much land from becoming taxable.

In 1908 the amount to be paid to the States was increased to 25 per cent., and a proviso of the earlier act that no more

should be paid to a county than 40 per cent. of its total income from other sources was eliminated. Since this proviso was removed some of the counties' receipts from national forest lands have equalled their income from all other sources.

In August, 1912, the agricultural appropriation act for the year made available an additional 10 per cent. of the money received from national forests to build and maintain roads and trails within national forests for the benefit of the public in the States from which these proceeds are derived. This 10 per cent. "road item," as it is called, is expended by the Secretary of Agriculture, who may, according to the act, "whenever practicable in the construction and maintenance of such roads, secure the co-operation or aid of the proper State or Territorial authorities in the furtherance of any system of highways of which such roads may be made a part." The total amount expended under this provision from the receipts of the fiscal year 1912 is \$207,295. This was apportioned among the States as follows: Alaska \$4675, Arizona \$24,645, Arkansas \$2283, California \$24,821, Colorado \$21,503, Florida \$931, Idaho \$23,809, Kansas \$489, Michigan \$2, Minnesota \$503, Montana \$23,925, Nebraska \$1650, Nevada \$6034, New Mexico \$11,850, North Dakota \$28, Oklahoma \$351, Oregon \$17,023, South Dakota \$4226, Utah \$13,504, Washington \$12,758, Wyoming \$12,254.

The Weeks law of March 1, 1911, providing for the acquisition of lands in the Appalachians, provides that 5 per cent. of moneys received from each national forest into which the lands acquired are divided be turned over to the State for its public schools and roads. New Mexico and Arizona, besides the sums before mentioned, are entitled to approximately 11 per cent. of the gross proceeds of all national forests in those States in return for the State school sections within national forests. This provision is embodied in the act of June 20, 1910, authorizing the admission of the two new States.

The South and the Immigrant.

Editor *Manufacturers Record*:

The new South. What an awakening. "Old things have passed away; behold, all things have become new." A new vision; a better concept; a quickened mentality borne on and supported by a noble purpose to rise above the ashes of defeat. What magnanimity as discovered most recently by the handshake on the old field of battle. That is the new chivalry that challenges the admiration of the world! And what has been done in commerce, industry and education? Refer to the records and ascertain as to the new South in its unparalleled success. The volume published by the MANUFACTURERS RECORD of Baltimore this year affords a complete compendium of the marvelous advance made by the new South since 1870 in commerce, agriculture and industry. This volume reads almost like a fairy tale, yet is, of course, founded upon the records of the United States and State authorities. The banking capital and resources of the new South, according to the United States Comptroller, for 1912 have since his last previous report increased more rapidly than any other part of the United States, being 260 per cent. as against the Pacific Coast States 240 per cent., Western States 227 per cent. and the New England States 60 per cent.

The character of the new South has been discovered in a manner to be warmly commended and emulated in her accomplishments on educational matters. Not

only confronted with her growing white population, with its immediate and constant demands upon the public exchequer, but in a much more drastic manner by the masses of ignorant negro population which must be educated to meet the demands of self-help and general uplift. The new South's progress in the latter respect has been discovered in the spirit of the truest chivalry. Whenever, as has been many times the case, the Legislatures of the several Southern States have had the issue presented to them as to whether or not the whites should be taxed to help in educating the negroes, the Legislatures have in every instance voted that such tax should be imposed upon the whites as well as upon the negroes. Herein lies the truest kind of magnanimity and altruism! The new South has been borne on not only with the desire of retrieving itself commercially, but with true consciousness has looked forward to and is rapidly achieving a higher and nobler civilization, realizing that the highest reward of labor is success, but the acme of success is found in character. Indeed, without character such achievements would not obtain.

And yet while the new South may well be in the spirit of self-congratulation because of what has been attained, the people are alive to "reaching forward to the things that are before" on social, moral and economic grounds. The questions of child labor, broader educational advantages for both professional and farming classes; a more enlightened and hence truer conception of political service as affecting all the people instead of favored classes, and the condition of the laboring classes and its social and economic effect upon the future stability of the home, and hence upon government. There have been efforts made to more or less extent by State and private interests looking toward inducing the immigrants from European countries to settle throughout the new South. If such a policy is pursued on wise and wholesome lines the social and economic order of the Southern States will be well conserved. If such inhabiting by those peoples is not for pure exploitation by selfish interests, and State measures are provided to bar the demagogue from preying upon their passions and misleading them as to the purposes of our government, then the public welfare will be well served, in the flow of time, by their presence with us. The South's opportunity for agricultural development alone provides a basis of habitation for these people that makes for the alpha of all wealth. Bear in mind that over 65 per cent. of all our immigrants come from off the land of their native countries. Most certainly the diseased, insane and criminal classes should be barred from our shores. But there is a prodigious fallacy in the popular mind that these conditions arise largely from the immigrant class, when, according to the United States and other reliable reports, just the opposite is true. The percentage of native-born criminals is far in excess of the percentage of criminals from the peoples coming to us from European countries, even from Southern and Southeastern Europe. This principle also holds good in connection with illiteracy as between the children of native and foreign-born parents. If space permitted we could pursue our inquiry in a more full and complete manner. Now, in view of the real facts of the case, in the event that any reasonable inflow of immigrants obtain, there will follow a rehabilitating and invigorating of the body politic that will make for the public welfare.

GEORGE EVANS BARSTOW,
Barstow, Tex.

Classified Opportunities

MEN WANTED

WANTED—First-class real estate salesman. At proposition to right man. Conditions right for large business. A future to the man who proves his ability. Give full information with first inquiry. Address Box 395, Wilmington, N. C.

WANTED—Salesmen in every large city to introduce a recently invented Metallic Packing; sells on thirty days' trial basis; price sells it; big commission; big future. Address E. Rolker, 440 4th Ave., N. Y. City.

WANTED—CLASS A SALESMAN to sell the White House All-Metal Kitchen Furniture on commission. Give confidential reference in first letter. Faultless Iron Works, St. Charles, Ill.

ACTIVE BUSINESS MEN of high standing wanted by responsible corporation charge of sales department; must have two or three thousand dollars cash well secured and automobile; experience not essential; \$4000 yearly; advancement and permanency to a hustler who can make good. Address Adjust, Box 105, Nashville, Tenn.

WANTED—SWEATER SALESMAN.—An experienced salesman to sell sweaters to the retail and jobbing trade. Address Highland Knitting Mills, Inc., Highland, N. Y.

WANTED—Capable, reliable logging contractor, experienced in handling men, to contract our cedar brakes; must have executive ability and be efficient in exerting authority; an excellent opportunity for the right man. Get in communication with us. Scholten Bros., Cedar Co., Lometa, Tex.

AGENTS—To sell the newest electric appliance on the market; sold everywhere there is electricity, in the home and office; liberal profits; sales-driving sample, weighs a pound; no experience or knowledge of electricity required; it shows how to use one light instead of two and get the same results; sells for \$3.50 and saves the purchaser an investment of \$25. Write for particulars. The Handy Light Co., 931 Handy Light Block, Cincinnati, Ohio.

WANTED—To correspond with real estate firm of high standing who are familiar with handling colonization proposition of high class; no cheap land; easy-payment proposition, but a highly developed, legitimate, value-received proposition. To the right parties will give the exclusive sales contract, but they will be required to make proper showing as to their ability to finance themselves and show by "past performances" their ability as "result getters." T. J. A., Box 14, Rural Route 3, Richmond, Ky.

AGENCIES WANTED

WANTED—Sales agency for all lines pertaining to builders' specialties; East Tennessee as territory; can furnish satisfactory references to interested concern; modern warehouse facilities. Address Daniel Briscoe, Jr., 325-327 State St., Knoxville, Tenn.

FIRE INSURANCE AGENCY WANTED—A real estate and building company recently organized in Richmond with \$25,000 capital wants agency for some strong fire insurance company. Address No. 1340, care Manufacturers Record.

WANTED—An old-established firm, whose business permits of taking on side lines, desires to represent manufacturers in Baltimore and vicinity; first-class references. Address No. 1355, care Manufacturers Record.

WANTED—High class, wide-awake young business man would like to represent manufacturer in State of Texas as State agent; commission basis; capable of handling men; highest references in the South. Address No. 1320, care Manufacturers Record.

SITUATIONS WANTED

WOULD like to connect myself with a lumber yard and planing mill as superintendent; have had 10 years' experience; can handle men and machinery; good references. Address No. 1259, care Manufacturers Record.

A MAN with 20 years' experience as superintendent and manager of manufacturing plants wishes to connect with a good live plant; understands machinery and handling of men; references. Address No. 1258, care Manufacturers Record.

SITUATION WANTED with manufacturing or railway company by mechanical graduate, age 23, with 1½ years' practical experience in shop and with U. S. engineers. Address No. 1344, care Manufacturers Record.

BUYER AND TRAFFIC AGENT—Man of thorough knowledge and wide experience in the purchase, distribution and use of materials seeks connection with progressive company; experience includes ores, metals, machinery, mill supplies, building materials, fuels, etc.; references furnished and satisfaction warranted. Practical Economist, Box 773, Atlanta, Ga.

ESTIMATOR AND CONTRACTOR'S ASSISTANT, thoroughly familiar with building situation, architects and subcontractors in Southern States; at present in charge of large work; wish to communicate with parties working in or about to start in this territory; am first-class man; can handle any kind and size work. Address No. 1335, care Manufacturers Record.

RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 25 lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

WANTED—Position as assistant secretary of Chamber of Commerce or something leading up to it. Am a professional young man. Baxter Genoble, Picolet, S. C.

MAIL ORDER SPECIALIST

HAVING YEARS OF EXPERIENCE in mail order specialty line, marketing article of merit yielding over \$100,000; having knowledge of mail order advertising, follow-up correspondence, circular literature, handling of selling agents over U. S. I desire to connect with parties wishing to market specialty or advertise generally. Address W. E. B., care of Manufacturers Record.

TYPEWRITER SUPPLIES

HIGHEST QUALITY TYPEWRITER SUPPLIES—Exclusively oil carbon and mineral coloring matter used in manufacture of carbon paper, which enables us to guarantee absolutely clean work and permanent copies. Our ribbons are made of imported silk, giving much additional strength. They are guaranteed non-fading and long wearing. Address A. Sylvester Edmonds, care of American Ribbon & Carbon Co., 209 Shackelford Building, Athens, Ga. Please mention Manufacturers Record in writing.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical, Electrical and Chemical Engineering and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Ch.E.), and Bachelor of Science (B.S.). Also special courses. Splendidly equipped new engineering laboratories. Send for catalogue to Registrar.

CAPITAL WANTED

A GOING CONCERN, owning its plant and doing a manufacturing, general machine shop, foundry and contract business, best location in South Atlantic States, fine prospects, plenty of work not easily affected by outside conditions, wants \$20,000 active working capital; terms to be arranged. Don't write unless genuinely interested and have the money. Address No. 1283, care Manufacturers Record.

NORTH GEORGIA MANUFACTURER has perfected and patented a farm wagon that sells locally on merit for 20 per cent. more than foreign makes; can be manufactured in quantities for less than competitive wagons; needs capital to enlarge market. Address No. 1334, care Manufacturers Record.

PERSONS interested are requested to investigate plan for utilizing sun's heat commercially in arid regions; \$4000 required within the next year for demonstration and additional patents. Address T. F. Nichols, Phoenix, Arizona.

BUSINESS OPPORTUNITIES

FOR LEASE—A factory 150x50; built of stone; very strong walls; near Atlanta, Ga. Hydro-electric power, suitable for knitting mill or pants factory; 10 operatives' houses with factory. Address No. 1353, care of Manufacturers Record.

WANTED—A concern to manufacture safety-razor blades. Address No. 1354, care Manufacturers Record.

C. E. GRADUATE, age 27, Assoc. M. Am. Soc. C. E., 7 years in charge of surveys and concrete construction work, will invest \$2500 with services in proposition offering permanent employment and good returns. Address No. 1356, care Manufacturers Record.

A SPLENDID BUSINESS OPPORTUNITY. Control of a successful wholesale hardware, mill and mine supply business in a locality where all conditions are favorable; can be had at a fair price. For information write 1252, care of Manufacturers Record.

FOR SALE—Salt works site, consisting of inexhaustible salt wells, pumping machinery, storage vats and strictly up-to-date and modern power-house with battery of six brand-new boilers. This site consists of about 60 acres of land with good trackage and switching facilities. Plant shipped approximately 400 cars per year prior to its burning down. Will sell outright or organize a company to rebuild the plant. Address No. 1336, care Manufacturers Record.

FOR SALE—Patent No. 1,947,269 for Automatic Adjustable Plug Tobacco Box. Novel features. Keeps plug fresh and clean. Nothing of this nature ever on market. Ten million tobacco chewers in United States. Can be manufactured at small cost and handled mail order if desired. Account no manufacturing facilities this section, will sell entire rights, cash and royalty, reasonable. Full information to manufacturers and investors. Benj. F. Miller (Patentee), 427 W. 52d Street, Los Angeles, Cal.

FOR RENT—Two stores, all modern conveniences, in handsome new postoffice building at entrance to university with 2000 students yearly and large community, mile and a half from business section of Charlottesville; ideal for men's furnishing, restaurant or drug store. Address W. M. Forrest, University, Va.

KAOLIN and china clay expert will develop properties, test material or manage plant; 20 years' experience with one firm. Address No. 1299, care Manufacturers Record.

WANTED—Party operate at his own expense sawmill, shingle and lathe mill, Mcland, Ga. Nice town with splendid water. Machinery furnished. Plenty of timber to be had cheap. Georgia Tie Co., Savannah, Ga.

FOR SALE—Wholesale and retail hardware business; Vordenbaumen-Eastham Co., Ltd., Shreveport, La.; will sell as a whole, or take in additional capital if party can put up or command enough money to make the business go; will turn over the management if parties wish. Shreveport is today and will continue to be one of the best jobbing propositions in the country; twelve railroads and a rapidly growing, bully good town; natural gas at .62 per M. right in town, and one of the largest oil fields in the world at our doors to help make business; low freight rates; 5-story 40x150 ft. building, long lease, long time and easy terms. Address E. H. Vordenbaumen, Receiver.

YOUNG, energetic man (28), wishes to invest \$2000 and services in some reasonably safe industrial enterprise; technical graduate; quick and anxious to learn new things; wishes to make a home, as present business requires a move every year or so. Address No. 1351, care Manufacturers Record.

OFFICE BUILDING FOR SALE

FOR SALE—Twelve-story modern office building, steel and concrete construction, located on a prominent corner in a growing Southern city of 150,000 population; yields an annual rental of \$54,000; will net 8% on the price asked. For further particulars address W. E. Hale, 412-413 First National Bank Bldg., Nashville, Tenn.

FACTORY SITES

HOUSTON, THE FINANCIAL AND RAILROAD CENTER of the Southwest, offers exceptional opportunities to factories. Having low water rates and being headquarters for all of the large oil companies, has the advantage of cheap fuel for manufacturing purposes. We control several desirable factory sites on the railroads. If interested, for full particulars address Box 1741, Houston, Texas.

INDUSTRIES WANTED

MISCELLANEOUS

SHREVEPORT, LA., WANTS FACTORIES—Free sites on railroad; natural gas at low rate; one block from electric car line. Correspondence solicited. Shreveport Factory Movement, 520 First Nat'l Bank Bldg.

ARE you seeking a factory site or a location for a wholesale or distributing house of any kind to reach the Southern and Southwestern markets? If so, Memphis is the place for you, because it is the geographical center and the gateway of the sections you wish to cover; because "Memphis makes the Kates," having 17 railroads and the Mississippi River, and because she has cheap and abundant raw materials, excellent labor conditions, and is unsurpassed as a residence city. Above all, she has 200,000 wide-awake citizens ready to welcome you and cooperate with you. Address John M. Tuther, Sec'y Business Men's Club, Memphis, Tenn.

KENOVA, W. VA., offers unsurpassed advantages for manufacturing enterprises—free sites, cheap gas, cheap coal, three trunk-line railroads with belt line and switches, interurban electric line to cities in West Virginia, Kentucky and Ohio; two navigable rivers; various kinds of raw materials easily available; best markets economically reached. Kenova-Huntington Land Co., Huntington, W. Va.

A SPLENDID FREE SITE FOR MILL OR FACTORY at the terminus of the Randolph & Cumberland Railroad, on the Deep River, Moore county, North Carolina. Ample acreage for large community of employees. Surroundings and climate ideal. The best geographical and commercial location; 1200 H. P. on river at this point; labor low priced and efficient. Main-line rates; choice of roads to gateways. A cotton mill in this vicinity that does not have the advantage of proximity to railroad is succeeding wonderfully in spite of handicap. J. R. McConnell, Industrial Agent, Carthage, N. C.

INDUSTRIAL PLANTS FOR SALE

FARM IMPLEMENT MANUFACTURING PLANT

FARM IMPLEMENT MANUFACTURING PLANT FOR SALE, in full operation, making money and unencumbered; six main buildings and up-to-date machinery. Price \$100,000. Owners selling on account of age. Would retain an interest if desired. Splendid opening. Write for particulars. McMath & Johnston, Memphis, Tenn.

BASKET AND CRATE FACTORY

FOR SALE—Basket and crate factory; first-class plant; running steady; best location in South; bargain; best reasons for sale. Address No. 1349, care Manufacturers Record.

COTTON MILL

BANKRUPT SALE—The Elmore Cotton Mill will be sold September 8, 1913, in front of the postoffice in Demopolis, Ala. This is a waste-yarn mill costing over \$100,000 about 10 years ago. Splendid brick building. Capacity 15,000 lbs. yarn per week. Nine sets cards, 3000 spindles and all necessary machinery. 300 H. P. Lane & Bodley engine. Sprinkler system, complete. 15 acres land. 20 cottages. Mill in operation. For further information apply to L. C. Lowe, Trustee, Demopolis, Ala.

FOUNDRY AND MACHINE SHOP

COMPLETE foundry and machine business in one of the best cities in Alabama; good business and on reasonable terms; a fine opportunity for parties wanting to get good established business; good reasons for selling. Address No. 1350, care Manufacturers Record.

BUILDING MATERIAL PLANT

BUILDING MATERIAL, manufacturing plant for sale in best business center of Southeast; plant in full operation; no competition; big money-maker; great opportunity for civil or structural engineer; good reasons for selling will be given; capital needed, \$30,000. Address No. 1342, care Manufacturers Record.

WATER-POWER MILL

SALE OR TRADE, FAMOUS ZOAR MILLS—Best equipped water-power mill in State. After 36 years' successful operation owner will retire. Write for particulars. Peter Bimler, Zoar, O.

ROLLING MILL

FOR SALE—Rolling Mill capable of making from 40-lb. rail down to 12-lb. Good shipping facilities; cheap coal. At great sacrifice price. Address Box 246, Lima, O.

TIMBER ESTIMATOR

WANTED—Banks, trust companies, lumbermen and manufacturers requiring independent estimates on standing timber, either hardwood or pine, to address T. O. Price, 4301 Charlotte Avenue, Nashville, Tenn. Reference, Hermitage National Bank.

SPECIALTY MANUFACTURING PLANT

HIGH-CLASS SPECIALTY manufacturing business for sale; well-equipped plant, recognized superior product; assets considerably larger than sale price; splendid opening for hustler with \$8000 or more. Address No. 1338, care Manufacturers Record.

REFRIGERATOR PLANT

FOR SALE—Three and one-half ton automatic refrigeration plant, complete, in first-class condition. We are selling at an extremely low figure, having purchased a larger machine of same make. Address Crenshaw Bros. & Saffold, Tampa, Fla.

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